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As filed with the Securities and Exchange Commission on November 2, 2018

Registration No. 333-227547

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

Amendment No. 2
to

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

OVASCIENCE, INC.
(Exact name of Registrant as specified in its charter)

Delaware	**2834**	**45-1472564**
(State or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification Number)

9 Fourth Avenue
Waltham, MA 02451
(617) 500-2802
(Address including zip code, and telephone number, including area code, of Registrant's principal executive offices)

Christopher A. Kroeger, M.D., M.B.A.
President & Chief Executive Officer
OvaScience, Inc.
9 Fourth Avenue
Waltham, MA 02451
(617) 500-2802
(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

William C. Hicks, Esq.	**Julia C. Owens, Ph.D.**	**Miguel J. Vega, Esq.**
Megan N. Gates, Esq.	**President & Chief Executive Officer**	**Nicole Brookshire, Esq.**
Daniel A. Bagliebter, Esq.	**Millendo Therapeutics, Inc.**	**Cooley LLP**
Mintz, Levin, Cohn, Ferris, Glovsky & Popeo, P.C.	**301 N. Main Street**	**500 Boylston Street**
One Financial Center	**Suite 100**	**14th Floor**
Boston, MA 02111	**Ann Arbor, MI 48104**	**Boston, MA 02116**
(617) 542-6000	**(734) 845-9000**	**(617) 937-2300**

Approximate date of commencement of proposed sale to the public:
As soon as practicable after the effectiveness of this registration statement and the satisfaction or waiver of all other conditions under the Merger Agreement described herein.

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

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, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer ☐	Accelerated filer ☒	Non-accelerated filer ☐	Smaller reporting company ☒ Emerging Growth Company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act ☐

If applicable, place an X in the box to designate the appropriate rule provision relied upon in conducting this transaction:

Exchange Act Rule 13(e)-4(i) (Cross-Border Issuer Tender Offer) ☐

Exchange Act Rule 14d-1(d) (Cross-Border Third-Party Tender Offer) ☐

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, as amended, or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

EXPLANATORY NOTE

This Amendment No. 2, referred to as Amendment No. 2, to the Registration Statement on Form S-4 (File No. 333-227547) of OvaScience, Inc., referred to as the Registration Statement, is being filed solely for the purpose of filing Exhibits 10.47, 10.48, 10.49, 10.50, 10.51, 10.52 and 10.53, as indicated in Part II of this Amendment No. 2. This Amendment No. 2 does not modify any provision of the proxy statement/prospectus/information statement that forms a part of the Registration Statement. Accordingly, the proxy statement/prospectus/information statement has been omitted.

PART II

INFORMATION NOT REQUIRED IN PROXY STATEMENT/PROSPECTUS/INFORMATION STATEMENT

Item 20. Indemnification of Directors and Officers

Subsection (a) of Section 145 of the General Corporation Law of the State of Delaware ("DGCL"), empowers a corporation to indemnify any person who was or is a party or who is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation) by reason of the fact that the person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with such action, suit or proceeding if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe the person's conduct was unlawful.

Subsection (b) of Section 145 empowers a corporation to indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor by reason of the fact that the person acted in any of the capacities set forth above, against expenses (including attorneys' fees) actually and reasonably incurred by the person in connection with the defense or settlement of such action or suit if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation, except that no indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

Section 145 further provides that to the extent a director or officer of a corporation has been successful on the merits or otherwise in the defense of any action, suit or proceeding referred to in subsections (a) and (b) of Section 145, or in defense of any claim, issue or matter therein, such person shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection therewith; that indemnification provided for by Section 145 shall not be deemed exclusive of any other rights to which the indemnified party may be entitled; and the indemnification provided for by Section 145 shall, unless otherwise provided when authorized or ratified, continue as to a person who has ceased to be a director, officer, employee or agent and shall inure to the benefit of such person's heirs, executors and administrators. Section 145 also empowers the corporation to purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against such person and incurred by such person in any such capacity, or arising out of his status as such, whether or not the corporation would have the power to indemnify such person against such liabilities under Section 145.

Section 102(b)(7) of the DGCL provides that a corporation's certificate of incorporation may contain a provision eliminating or limiting the personal liability of a director to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, provided that such provision shall not eliminate or limit the liability of a director (i) for any breach of the director's duty of loyalty to the corporation or its stockholders, (ii) for acts or omissions not in good faith or which

involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of the DGCL or (iv) for any transaction from which the director derived an improper personal benefit.

OvaScience's restated certificate of incorporation provides that OvaScience shall indemnify and advance expenses to each person who was or is a party or threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether criminal, civil, administrative or investigative, by reason of the fact that he or she is or was, or has agreed to become, a director or officer of OvaScience, or is or was serving, or has agreed to serve, at the request of OvaScience, as a director, officer, partner, employee or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise, or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees), liabilities, losses, judgments, fines, and amounts paid in settlement actually and reasonably incurred in connection with such action, suit or proceeding and any appeal therefrom.

OvaScience has indemnification agreements with its directors, in addition to the indemnification provided for in its restated certificate of incorporation, and intends to enter into indemnification agreements with any new directors in the future.

OvaScience has purchased and intends to maintain insurance on behalf of any person who is or was a director or officer of OvaScience against any loss arising from any claim asserted against him or her and incurred by him or her in any such capacity, subject to certain exclusions.

Pursuant to the terms of the Merger Agreement and subject to applicable law, from the Effective Time through the sixth anniversary of the date on which the Effective Time occurs, OvaScience shall indemnify and hold harmless each person who is now, or has been at any time prior to the date thereof, or who becomes prior to the Effective Time, a director or officer of OvaScience or Millendo, respectively, against all Costs incurred in connection with any claim, action, suit, proceeding or investigation, whether civil, criminal, administrative or investigative, arising out of or pertaining to the fact that such person is or was a director or officer of OvaScience or Millendo, whether asserted or claimed prior to, at or after the Effective Time, in each case, to the fullest extent permitted under the DGCL for directors or officers of Delaware corporations, provided that such officer or director acted in good faith and in a manner such party reasonably believed to be in or not opposed to the best interest of OvaScience or the Surviving Corporation, as applicable, and, with respect to any criminal proceeding, such officer or director had no reasonable cause to believe such conducted was unlawful; provided, further, that, if applicable law so provides, no indemnification against such Costs shall be made in respect of any claim, issue or matter in such proceeding as to which the director or officer shall have been adjudged to be liable to OvaScience or the Surviving Corporation unless and to the extent that the Court of Chancery of the State of Delaware shall determine that such indemnification may be made. Subject to applicable law, each such director and officer will be entitled to advancement of expenses incurred in the defense of any such claim, action, suit, proceeding or investigation from each of OvaScience and the Surviving Corporation, jointly and severally, upon receipt by OvaScience or the Surviving Corporation from such director or officer of a request therefor; provided that any such person to whom expenses are advanced provides an undertaking to OvaScience or the Surviving Corporation, as applicable, to the extent then required by the DGCL, to repay such advances if it is ultimately determined that such person is not entitled to indemnification. Such statement or statements shall reasonably evidence the expenses incurred by the directors and officers.

Further, pursuant to the Merger Agreement, the provisions of the OvaScience restated certificate of incorporation and the OvaScience by-laws with respect to indemnification, advancement of expenses and exculpation of present and former directors and officers of OvaScience shall not be amended, modified or repealed for a period of six years from the Effective Time in a manner that would adversely affect the rights thereunder of individuals who, at or prior to the Effective Time, were officers or directors of OvaScience, unless such modification is required by applicable law.

From and after the Effective Time, (i) the Surviving Corporation shall fulfill and honor in all respects the obligations of Millendo to each person who is or has served as a director or officer of Millendo as of immediately prior to the Closing pursuant to any indemnification provisions under the Millendo certificate of incorporation or Millendo bylaws and pursuant to any indemnification agreements between Millendo and such directors and officers, with respect to claims arising out of matters occurring at or prior to the Effective Time and (ii) OvaScience shall fulfill and honor in all respects the obligations of OvaScience to each person who is or has served as a director or officer of OvaScience as of immediately prior to the Closing pursuant to any indemnification provisions under the OvaScience Charter or OvaScience Bylaws and pursuant to any indemnification agreements between OvaScience and such directors and officers that were in effect prior to the date of the Merger Agreement, with respect to claims arising out of matters occurring at or prior to the Effective Time.

The Merger Agreement also provides that OvaScience shall maintain directors' and officers' liability insurance policies commencing at the closing time of the Merger, on commercially available terms and conditions with coverage limits customary for U.S. public companies similar situated to OvaScience. In addition, OvaScience shall purchase, prior to the Effective Time, a six-year prepaid "D&O tail policy" for the non-cancellable extension of the directors' and officers' liability coverage of OvaScience's existing directors' and officers' insurance policies and OvaScience's existing fiduciary liability insurance policies, in each case, for a claims reporting or discovery period of at least six years from and after the Effective Time.

From and after the Effective Time, OvaScience shall pay all expenses, including reasonable attorneys' fees, that are incurred by indemnified persons in connection with their successful enforcement of the rights provided to such persons in the Merger Agreement. The director and officer indemnification provisions of the Merger Agreement are intended to be in addition to the rights otherwise available to the current and former officers and directors of OvaScience and Millendo by law, charter, statute, bylaw or agreement, and shall operate for the benefit of, and shall be enforceable by, each of such indemnified persons, their heirs and their representatives.

In the event OvaScience or the Surviving Corporation or any of their respective successors or assigns (i) consolidates with or merges into any other person and shall not be the continuing or surviving corporation or entity of such consolidation or merger, or (ii) transfers all or substantially all of its properties and assets to any person, then, and in each such case, proper provision shall be made so that the successors and assigns of OvaScience or the Surviving Corporation, as the case may be, shall succeed to the indemnification obligations set forth in the Merger Agreement. OvaScience shall cause the Surviving Corporation to perform all of the director and officer indemnification obligations of the Surviving Corporation under the Merger Agreement.

Item 21. Exhibits and Financial Statement Schedules

(a) Exhibit Index

A list of exhibits filed with this registration statement on Form S-4 is set forth on the Exhibit Index and is incorporated herein by reference.

(b) Financial Statements

No financial statements are being filed with this Amendment No. 2 to the registration statement on Form S-4.

Item 22. Undertakings

(a) The undersigned registrant hereby undertakes as follows:

(1) That prior to any public reoffering of the securities registered hereunder through use of a proxy statement/prospectus/information statement which is a part of this registration statement, by any person or party who is deemed to be an underwriter within the meaning of Rule 145(c), the issuer undertakes that such reoffering proxy statement/prospectus/information statement will contain the information called for by the applicable registration form with respect to reofferings by persons who may be deemed underwriters, in addition to the information called for by the other items of the applicable form.

(2) That every proxy statement/prospectus/information statement (i) that is filed pursuant to paragraph (a)(1) immediately preceding, or (ii) that purports to meet the requirements of Section 10(a)(3) of the Securities Act and is used in connection with an offering of securities subject to Rule 415, will be filed as a part of an amendment to the registration statement and will not be used until such amendment is effective, and that, for purposes of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To respond to requests for information that is incorporated by reference into this proxy statement/prospectus/information statement pursuant to Item 4, 10(b), 11, or 13 of this Form, within one business day of receipt of such request, and to send the incorporated documents by first class mail or other equally prompt means. This includes information contained in documents filed subsequent to the effective date of the registration statement through the date of responding to the request.

(4) To supply by means of a post-effective amendment all information concerning a transaction, and the company being acquired involved therein, that was not the subject of and included in the registration statement when it became effective.

(b) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

EXHIBIT INDEX

Exhibit Number	Description of Document
2.1*	Agreement and Plan of Merger and Reorganization, dated as of August 8, 2018, by and among OvaScience, Inc., Orion Merger Sub, Inc. and Millendo Therapeutics, Inc. (incorporated by reference from Annex A to the proxy statement/prospectus/information statement forming a part of Amendment No. 1 to this Registration Statement, as filed with the Securities and Exchange Commission on November 1, 2018).
2.2*	First Amendment to Agreement and Plan of Merger and Reorganization, dated as of August 8, 2018, by and among OvaScience, Inc., Orion Merger Sub, Inc. and Millendo Therapeutics, Inc., dated as of September 25, 2018 (incorporated by reference from Annex A to the proxy statement/prospectus/information statement forming a part of Amendment No. 1 to this Registration Statement, as filed with the Securities and Exchange Commission on November 1, 2018).
2.3*	Second Amendment to Agreement and Plan of Merger and Reorganization, dated as of August 8, 2018, by and among OvaScience, Inc., Orion Merger Sub, Inc. and Millendo Therapeutics, Inc., dated as of November 1, 2018 (incorporated by reference from Annex A to the proxy statement/prospectus/information statement forming a part of Amendment No. 1 to this Registration Statement, as filed with the Securities and Exchange Commission on November 1, 2018).
2.4*	Form of OvaScience Voting Agreement, by and between Millendo Therapeutics, Inc. and certain stockholders of OvaScience, Inc. (incorporated by reference from Annex A to the proxy statement/prospectus/information statement forming a part of Amendment No. 1 to this Registration Statement, as filed with the Securities and Exchange Commission on November 1, 2018).
2.5*	Form of Voting Agreement by and between OvaScience, Inc. and certain stockholders of Millendo Therapeutics, Inc., and solely for purposes of Section 1.4 thereof, OvaScience, Inc. (incorporated by reference from Annex A to the proxy statement/prospectus/information statement forming a part of Amendment No. 1 to this Registration Statement, as filed with the Securities and Exchange Commission on November 1, 2018).
2.6*	Form of Lock-up Agreement, by and between OvaScience, Inc. and Millendo Therapeutics, Inc. and certain stockholders of OvaScience, Inc. and Millendo Therapeutics, Inc. (incorporated by reference from Annex A to the proxy statement/prospectus/information statement forming a part of Amendment No. 1 to this Registration Statement, as filed with the Securities and Exchange Commission on November 1, 2018).
3.1	Restated Certificate of Incorporation of OvaScience, Inc. (incorporated by reference from the Current Report on Form 8-K filed with the Securities and Exchange Commission on April 30, 2013).
3.2	Third Amended and Restated Bylaws, as Amended, of OvaScience, Inc. (incorporated by reference from the Current Report on Form 8-K filed with the Securities and Exchange Commission on August 9, 2018).
4.1	Specimen Stock Certificate evidencing shares of Common Stock of OvaScience, Inc. (incorporated by reference from the Registration Statement on Form S-1 filed with the Securities and Exchange Commission on August 29, 2012).
5.1	Opinion of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. regarding the validity of the securities.
8.1*	Legal Opinion of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. regarding tax matters.

Exhibit Number	Description of Document
8.2*	Opinion of Cooley LLP regarding tax matters.
10.1#	2011 Stock Incentive Plan (incorporated by reference from Exhibit 10.1 to the Registration Statement on Form 10 filed on April 11, 2012, File No. 000-54647).
10.2#	Form of Incentive Stock Option Agreement under the 2011 Stock Incentive Plan (incorporated by reference from Exhibit 10.2 to the Registration Statement on Form 10 filed on May 17, 2012, File No. 000-54647).
10.3#	Form of Nonstatutory Stock Option Agreement under the 2011 Stock Incentive Plan (incorporated by reference from Exhibit 10.3 to the Registration Statement on Form 10 filed on May 17, 2012, File No. 000-54647).
10.4#	Form of Restricted Stock Agreement under the 2011 Stock Incentive Plan (incorporated by reference from Exhibit 10.4 to the Registration Statement on Form 10 filed on April 11, 2012, File No. 000-54647).
10.5#	2012 Stock Incentive Plan (incorporated by reference from Exhibit 10.5 to the Registration Statement on Form 10 filed on April 11, 2012, File No. 000-54647).
10.6#	Form of Incentive Stock Option Agreement under the 2012 Stock Incentive Plan (incorporated by reference from Exhibit 10.6 to the Annual Report on Form 10-K filed on March 16, 2015, File No. 001-35890).
10.7#	Form of Nonstatutory Stock Option Agreement (incorporated by reference from Exhibit 10.7 to the Annual Report on Form 10-K filed on March 16, 2015, File No. 001-35890).
10.8†	Exclusive License Agreement, dated June 27, 2011, between OvaScience, Inc. and the General Hospital Corporation (incorporated by reference from Exhibit 10.2 to the Quarterly Report on Form 10-Q filed on May 11, 2015, File No. 001-35890).
10.9†	Amendment No. 1 to the Exclusive License Agreement, dated September 7, 2011, between OvaScience, Inc. and the General Hospital Corporation (incorporated by reference from Exhibit 10.3 to the Quarterly Report on Form 10-Q filed on May 11, 2015, File No. 35890).
10.10†	Amendment No. 2 to the Exclusive License Agreement, dated July 30, 2013, between OvaScience, Inc. and the General Hospital Corporation (incorporated by reference from Exhibit 10.12 to the Annual Report on Form 10-K filed on February 27, 2014, File No. 001-35890).
10.11	Amendment No. 3 to the Exclusive License Agreement, dated September 9, 2013, between OvaScience, Inc. and the General Hospital Corporation (incorporated by reference from Exhibit 10.13 to the Annual Report on Form 10-K filed on February 27, 2014, File No. 001-35890).
10.12†	Amendment No. 4 to the Exclusive License Agreement, dated November 14, 2013, between OvaScience, Inc. and the General Hospital Corporation (incorporated by reference from Exhibit 10.14 to the Annual Report on Form 10-K filed on February 27, 2014, File No. 001-35890).
10.13†	Amendment No. 5 to the Exclusive License Agreement, dated December 18, 2013, between OvaScience, Inc. and the General Hospital Corporation (incorporated by reference from Exhibit 10.15 to the Annual Report on Form 10-K filed on February 27, 2014, File No. 001-35890).
10.14†	Amendment No. 6 to the Exclusive License Agreement, dated August 29, 2016, between OvaScience, Inc. and the General Hospital Corporation (incorporated by reference from Exhibit 10.3 to the Quarterly Report on Form 10-Q filed on November 3, 2016, File No. 001-35890).

Exhibit Number	Description of Document
10.15†	Amendment and Restated Exclusive License Agreement, dated November 6, 2017, between OvaScience, Inc. and the General Hospital Corporation (incorporated by reference from Exhibit 10.15 the Annual Report on Form 10-K on March 15, 2018, File No. 001-35890).
10.16†	Intellectual Property License Agreement, dated December 18, 2013, between OvaScience, Inc. and OvaXon, LLC (incorporated by reference from Exhibit 10.34 to the Annual Report on Form 10-K filed on February 27, 2014, File No. 001-35890).
10.17†	Exclusive Channel Collaboration Agreement, dated December 18, 2013, between OvaScience, Inc. and Intrexon Corporation and OvaXon, LLC (incorporated by reference from Exhibit 10.35 to the Annual Report on Form 10-K filed on February 27, 2014, File No. 001-35890).
10.18	Exclusive Channel Collaboration Agreement, dated December 18, 2013, between OvaScience, Inc. and OvaXon, LLC (incorporated by reference from Exhibit 10.36 to the Annual Report on Form 10-K filed on February 27, 2014, File No. 001-35890).
10.19	Lease Agreement, dated May 22, 2015, by and between Nine Fourth Avenue LLC and OvaScience, Inc. (incorporated by reference from Exhibit 10.1 to the Quarterly Report on Form 10-Q filed on August 10, 2015, File No. 001-35890).
10.20#	Form of Indemnification Agreement between OvaScience, Inc. and Richard Aldrich (incorporated by reference from Exhibit 10.21 to the Registration Statement on Form 10 filed on April 11, 2012, File No. 000-54647).
10.21#	Form of Indemnification Agreement between OvaScience, Inc. and each of Jeffrey Capello, Mary Fisher, John Howe, Marc Kozin, Thomas Malley and John Sexton (incorporated by reference from Exhibit 10.22 to the Registration Statement on Form 10 filed on April 11, 2012, File No. 000-54647).
10.22#	Amended and Restated Non-Employee Director Compensation Policy of OvaScience, Inc. (incorporated by reference from Exhibit 10.34 to the Annual Report on Form 10-K filed on March 16, 2015, File No. 001-35890).
10.23#	Amended and Restated Letter Agreement, dated December 9, 2014, between OvaScience, Inc. and Michelle Dipp (incorporated by reference from Exhibit 10.21 to the Annual Report on Form 10-K filed on March 16, 2015, File No. 001-35890).
10.24#	Stock Option Agreement, dated December 9, 2014, between OvaScience, Inc. and Michelle Dipp (incorporated by reference from Exhibit 10.24 to the Annual Report on Form 10-K filed on March 16, 2015, File No. 001-35890).
10.25#	Executive Agreement, dated January 5, 2016, between OvaScience, Inc. and Michelle Dipp (incorporated by reference from Exhibit 10.29 to the Annual Report on Form 10-K filed with on February 26, 2016, File No. 001-35890).
10.26#	Independent Consulting Agreement and Separation Agreement, dated March 31, 2016, between OvaScience, Inc. and Arthur Tzianabos (incorporated by reference from Exhibit 10.9 to the Quarterly Report on Form 10-Q filed on May 5, 2016, File No. 001-35890).
10.27#	Offer Letter, dated September 6, 2016, by and between OvaScience, Inc. and Christophe Couturier (incorporated by reference from Exhibit 10.1 to the Current Report on Form 8-K filed on September 6, 2016, File No. 001-35890).
10.28#	Nonstatutory Stock Option Agreement between OvaScience, Inc. and Christophe Couturier dated September 6, 2016 (incorporated by reference from Exhibit 10.2 to the Quarterly Report on Form 10-Q filed with on November 3, 2016, File No. 001-35890).

Exhibit Number	Description of Document
10.29#	Separation Agreement between OvaScience, Inc. and Harald Stock dated December 21, 2016 (incorporated by reference from the Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 2, 2017).
10.30#	Separation Agreement between OvaScience, Inc. and Paul W.D. Chapman dated December 21, 2016 (incorporated by reference from Exhibit 10.43 to the Annual Report on Form 10-K filed on March 2, 2017, File No. 001-35890).
10.31#	Employment Agreement, dated June 21, 2017, between OvaScience, Inc. and Christopher Kroeger (incorporated by reference from Exhibit 10.1 to the Quarterly Report on Form 10-Q filed on August 3, 2017, File No. 001-35890).
10.32#	Advisory Agreement between OvaScience, Inc. and Michelle Dipp, M.D., dated as of June 21, 2017, as amended as of August 3, 2017 (incorporated by reference from Exhibit 10.2 to the Quarterly Report on Form 10-Q filed on August 3, 2017, File No. 001-35890).
10.33#	Separation Agreement between OvaScience, Inc. and Christopher Couturier, dated June 21, 2017 (incorporated by reference from Exhibit 10.3 to the Quarterly Report on Form 10-Q filed on August 3, 2017, File No. 001-35890).
10.34#	Amended Employment Agreement between OvaScience, Inc. and Jonathan Gillis, dated as of June 14, 2017 (incorporated by reference from Exhibit 10.4 to the Quarterly Report on Form 10-Q filed on August 3, 2017, File No. 001-35890).
10.35#	Nonstatutory Stock Option Agreement, dated June 21, 2017, between OvaScience, Inc. and Christophe A. Kroeger (incorporated by reference from Exhibit 10.1 to the Quarterly Report on Form 10-Q filed on November 2, 2017, File No. 001-35890).
10.36#	Offer Letter, dated January 2, 2018, between OvaScience, Inc. and James Lillie (incorporated by reference from Exhibit 10.36 to the Annual Report on Form 10-K filed on March 15, 2018, File No. 001-35890).
10.37#	Sales Agreement between OvaScience, Inc. and Cowen and Company, LLC, dated November 3, 2016 (incorporated by reference from Exhibit 1.2 to the Registration Statement on Form S-3 filed on November 3, 2016, File No. 333-214413).
10.38#	Nonstatutory Stock Option Agreement between OvaScience, Inc. and James W. Lillie, Ph.D., dated March 6, 2018 (incorporated by reference from Exhibit 10.1 to the Quarterly Report on Form 10-Q filed on May 3, 2018, File No. 001-35890).
10.39#	Termination of Advisory Agreement between OvaScience, Inc. and Michelle Dipp, dated April 30, 2018 (incorporated by reference from Exhibit 10.4 to the Quarterly Report on Form 10-Q filed on May 3, 2018, File No. 001-35890).
10.40#	Retention Agreement between OvaScience and Christopher A. Kroeger, dated May 3, 2018 (incorporated by reference from Exhibit 10.1 to the Quarterly report on Form 10-Q filed on August 9, 2018, File No. 001-35890).
10.41#	Retention Agreement between OvaScience and James Lillie, dated May 3, 2018 (incorporated by reference from Exhibit 10.2 to the Quarterly report on Form 10-Q filed on August 9, 2018, File No. 001-35890).
10.42#	Retention Agreement between OvaScience and Jonathan Gillis, dated May 3, 2018 (incorporated by reference from Exhibit 10.3 to the Quarterly report on Form 10-Q filed on August 9, 2018, File No. 001-35890).
10.43#	Amendment to Retention Agreement between OvaScience and Jonathan Gillis, dated May 3, 2018 (incorporated by reference from Exhibit 10.4 to the Quarterly report on Form 10-Q filed on August 9, 2018, File No. 001-35890).

Exhibit Number	Description of Document
10.44†*	Amended and Restated License Agreement, by and between Millendo Therapeutics, Inc. and the Regents of the University of Michigan, dated November 9, 2015.
10.45*	Stock Purchase Agreement, by and among OvaScience, Inc., the purchasers set forth on Schedule I thereto and Millendo Therapeutics, Inc., dated November 1, 2018.
10.46*	Registration Rights Agreement, by and among OvaScience, Inc. and the persons listed on Schedule A thereto, dated November 1, 2018.
10.47	Contract No. A1308020, by and between Alizé Pharma SAS (n/k/a Millendo Therapeutics SAS) and Bpifrance Financement, dated January 27, 2014.
10.48	Contract No. A1308020, by and between Alizé Pharma SAS (n/k/a Millendo Therapeutics SAS) and Bpifrance Financement, dated January 27, 2014 (English Translation).
10.49#	Atterocor, Inc. (n/k/a Millendo Therapeutics, Inc.) 2012 Stock Incentive Plan.
10.50#	Offer Letter, by and between Millendo Therapeutics, Inc. and Jeffery M. Brinza, dated July 28, 2015.
10.51	Assignment Agreement, by and among Alizé Pharma SAS (n/k/a Millendo Therapeutics SAS), Erasmus University Medical Center and the University of Turin, dated April 25, 2007.
10.52#	Employment Agreement, by and between Millendo Therapeutics, Inc. and Julia C. Owens, Ph.D., dated July 25, 2012.
10.53#	Offer Letter, by and between Millendo Therapeutics, Inc. and Pharis Mohideen, M.D., dated October 10, 2014.
23.1*	Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm to OvaScience, Inc.
23.2*	Consent of Ernst & Young LLP, Independent Auditors to Millendo Therapeutics, Inc.
23.3*	Consent of RSM Rhône-Alpes, Independent Auditors to Millendo Therapeutics SAS.
23.4	Consent of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. (included in Exhibit 5.1 hereto).
23.5*	Consent of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. (included in Exhibit 8.1 hereto).
23.6*	Consent of Cooley LLP (included in Exhibit 8.2 hereto).
24.1*	Power of attorney (included on the signature page to this Registration Statement filed on September 26, 2018).
99.1*	Form of Proxy Card for the OvaScience, Inc. Special Meeting of Stockholders.
99.2*	Opinions of Ladenburg Thalmann & Co., Inc., financial advisor to OvaScience, Inc. (incorporated by reference from Annexes B-1 and B-2 to the proxy statement/prospectus/information statement forming a part of Amendment No. 1 to this Registration Statement, as filed with the Securities and Exchange Commission on November 1, 2018).
99.3	Consent of Ladenburg Thalmann & Co., financial advisor to OvaScience, Inc.
99.4*	Proposed Certificate of Amendment to the Restated Certificate of Incorporation of OvaScience, Inc. for Reverse Stock Split (incorporated by reference from Annex D to the proxy statement/prospectus/information statement forming a part of Amendment No. 1 to this Registration Statement, as filed with the Securities and Exchange Commission on November 1, 2018).

Exhibit Number	Description of Document
99.5*	Proposed Certificate of Amendment to the Restated Certificate of Incorporation of OvaScience, Inc. for Name Change (incorporated by reference from Annex E to the proxy statement/prospectus/information statement forming a part of Amendment No. 1 to this Registration Statement, as filed with the Securities and Exchange Commission on November 1, 2018).
99.6*	Consent of Carol G. Gallagher, Pharm.D. to be named as a director.
99.7*	Consent of Carole L. Nuechterlein to be named as a director.
99.8*	Consent of Julia C. Owens, Ph.D. to be named as a director.
99.9*	Consent of James M. Hindman to be named as a director.
99.10*	Consent of Randall W. Whitcomb, M.D. to be named as a director.
99.11*	Consent of Mary Lynne Hedley, Ph.D. to be named as a director.
99.12*	Consent of Habib J. Dable to be named as a director.
101*	The following materials from the Registrant's Annual Report on Form 10-K for the year ended December 31, 2017 and the Registrant's Quarterly Reports on Form 10-Q for the quarters ending June 30, 2018 and March 31, 2018, formatted in Extensible Business Reporting Language (XBRL) includes: (i) Balance Sheets at June 30, 2018, March 31, 2018 and December 31, 2017, (ii) Statements of Operations and Comprehensive Loss for the Six Months Ended June 30, 2018 and 2017, (iii) Statements of Cash Flows for the Six Months Ended June 30, 2018 and 2017 and (iv) Notes to Financial Statements.

* Previously filed.

\# Indicates a management contract or compensatory plan, contract or arrangement.

† Confidential treatment has been requested as to certain portions, which portions have been omitted and filed separately with the Securities and Exchange Commission.

SIGNATURES

Pursuant to the requirements of the Securities Act, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized in the City of Waltham, Commonwealth of Massachusetts, on the 2nd day of November, 2018.

OVASCIENCE, INC.

/s/ CHRISTOPHER A. KROEGER, M.D., M.B.A

Christopher A. Kroeger, M.D., M.B.A.
President and Chief Executive Officer

Pursuant to the requirements of the Securities Act, this registration statement has been signed by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ CHRISTOPHER A. KROEGER, M.D., M.B.A. Christopher A. Kroeger, M.D., M.B.A.	President and Chief Executive Officer (principal executive officer)	November 2, 2018
/s/ JONATHAN GILLIS Jonathan Gillis	Senior Vice President, Finance (principal financial officer)	November 2, 2018
* Jeffrey D. Capello	Director	November 2, 2018
* Richard Aldrich	Director	November 2, 2018
* Mary Fisher	Director	November 2, 2018
* John P. Howe, III, M.D.	Director	November 2, 2018
* Marc Kozin	Director	November 2, 2018
* John Sexton, Ph.D.	Director	November 2, 2018

*By: /s/ CHRISTOPHER A. KROEGER, M.D., M.B.A.
Christopher A. Kroeger, M.D., M.B.A.
Attorney-in-Fact

QuickLinks

Exhibit 5.1

One Financial Center
Boston, MA 02111
617 542 6000
mintz.com

November 2, 2018

OvaScience, Inc.
9 Fourth Avenue
Waltham, MA 02451

Ladies and Gentlemen:

We have acted as counsel to OvaScience, Inc. (the "Company") in connection with the filing by the Company of a Registration Statement on Form S-4 (as amended, the "Registration Statement") with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "Securities Act"). The Registration Statement provides for the registration by the Company of up to 14,620,930 shares of its common stock, par value $0.001 (the "Shares") upon the consummation of the merger (the "Merger") of Orion Merger Sub, Inc., a Delaware corporation and a direct, wholly-owned subsidiary of the Company ("Orion Merger Sub"), with and into Millendo Therapeutics, Inc., a Delaware corporation ("Millendo"), pursuant to the Agreement and Plan of Merger and Reorganization, dated August 8, 2018, as amended on September 25, 2018 and on November 1, 2018, by and among the Company, Orion Merger Sub and Millendo (the "Merger Agreement").

In connection with this opinion, we have examined the actions taken by the Company in connection with the authorization of the issuance of the Shares, and such documents as we have deemed necessary for the purpose of rendering this opinion. In our examination, we have assumed the genuineness of all signatures, the legal capacity of natural persons, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as certified or photostatic copies and the authenticity of the originals of such copies. As to questions of fact material to this opinion, we have relied upon certificates or comparable documents of public officials and of officers and representatives of the Company.

Our opinion is limited to the federal laws of the United States and the General Corporation Law of the State of Delaware and we express no opinion with respect to the laws of any other jurisdiction. No opinion is expressed herein with respect to the qualification of the Shares under the securities or blue sky laws of any state or any foreign jurisdiction.

Please note that we are opining only as to the matters expressly set forth herein, and no opinion should be inferred as to any other matters. This opinion is based upon currently existing statutes, rules, regulations and judicial decisions, and we disclaim any obligation to advise you of any change in any of these sources of law or subsequent legal or factual developments which might affect any matters or opinions set forth herein.

Based upon and subject to the foregoing, it is our opinion that, when the Shares are issued and delivered by the Company in accordance with the Merger Agreement, the Shares will be validly issued, fully paid and non-assessable.

We understand that you wish to file this opinion with the Commission as an exhibit to the Registration Statement in accordance with the requirements of Item 601(b)(5) of Regulation S-K promulgated under the Securities Act and to reference the firm's name under the caption "Legal Matters" in the prospectus which forms part of the Registration Statement, and we hereby consent thereto. In giving this consent, we do not admit that we are within the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission promulgated thereunder.

Very truly yours,

/s/ Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.

Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.

Exhibit 10.47

Bpifrance Sud-Est
186 avenue Thiers
69465 Lyon Cedex 06

CONTRAT N° A1308020 V

Entre :

1°) **Bpifrance Financement**
Société Anonyme au capital de 750 860 784 euros
Immatriculée au Registre du Commerce et des Sociétés de Créteil sous le numéro 320 252 489
Dont le siège social est situé au 27-31, avenue du Général Leclerc - 94710 MAISONS-ALFORT Cedex
Représentée par Madame Corinne PERRET-HONEGGER, agissant en qualité de Responsable du Service Innovation et Immatériel
Désignée ci-après par « Bpifrance Financement »

D'une part,

Et:

2°) **ALIZE PHARMA**
SAS, au capital de 110 894,00 euros
N° SIRET: 49757562100022
ESPACE EUROPEEN
15 CHEMIN DU SAQUIN
69130 ECULLY
Représentée par la SARL TAB CONSULTING, agissant en qualité de Président, elle-même représentée par Monsieur THIERRY ABRIBAT, agissant en qualité de Gérant
Désignée ci-après par le « BENEFICIAIRE »

D'autre part,

Vu le décret n° 97-682 du 31 mai 1997, relatif à l'aide à l'innovation ;

Vu l'ordonnance n°2005-722 du 29 juin 2005 modifiée relative à la création de l'établissement public OSEO et de la société anonyme OSEO ;

Vu l'encadrement communautaire des aides d'Etat à la recherche, au développement et à l'innovation n°2006/C 323/01 publié au Journal Officiel de l'Union Européenne (JOUE) du 30 décembre 2006 ;

Vu le régime d'Aide d'Etat N408/2007 d'intervention d'OSEO innovation en faveur de la recherche, du développement et de l'innovation en date du 17 Janvier 2008 ;

Vu les articles 60 à 64 de la loi n° 2010-1249 du 22 octobre 2010 de régulation bancaire et financière ;

Vu le décret n° 2010-1672 du 28 décembre 2010 approuvant les statuts de la société anonyme OSEO et portant diverses dispositions relatives à son fonctionnement;

Vu la décision de l'Assemblée Générale d'OSEO SA en date du 12 juillet 2013, changeant la dénomination sociale d'OSEO SA en Bpifrance Financement SA ;

Vu le décret n° 2013-637 du 12 juillet 2013 approuvant les statuts de la société anonyme Bpifrance Financement;

Vu la demande d'aide à l'innovation déposée par le BENEFICIAIRE et enregistrée le 18/07/2013 sous le n°A1308020 V ;

Vu les instructions technique et financière effectuées dans les conditions prévues à l'article 7 du décret n° 97-682 susvisé ;

CONDITIONS PARTICULIERES D'OCTROI DE L'AIDE

ARTICLE 1 — MONTANT, OBJET ET FORME DE L'AIDE

1.1.- Bpifrance Financement accorde au BENEFICIAIRE, sous les modalités et conditions de versements prévues à l'article 2, une aide à l'innovation d'un montant de **750 000,00** €.
Cette aide est affectée au programme visé dans l'exposé présenté par le BENEFICIAIRE et ayant pour objet :

Essai clinique de phase 1 b chez le patient diabètique de type 2 pour AZP - 531.

1.2.- En contrepartie de cette aide, le BENEFICIAIRE s'engage à réaliser le programme présenté dans un délai de 18 mois, à compter du 18/07/2013, et à mettre en oeuvre tous les moyens humains, techniques, financiers et commerciaux nécessaires au succès de son exécution et de l'exploitation commerciale de ses résultats.

1.3.- Le montant total estimatif du programme présenté est de **1 917 162,40** € hors taxes. Les dépenses du programme d'innovation retenues dans l'assiette de l'aide s'élèvent à : **1 917 162,40 €** hors taxes, selon devis en annexe.
En conséquence, le montant prévu ci-dessus représente 39,12 % du total des dépenses, hors taxes, retenues dans l'assiette de l'aide à l'innovation. La présente aide est accordée au BENEFICIAIRE sous forme d'une avance remboursable.

ARTICLE 2 - MODALITES ET CONDITIONS DE VERSEMENT DE L'AIDE

2.1.- Les fonds seront mis à disposition du BENEFICIAIRE en 2 versements :

- une somme de 500 000,00 € après la date de signature du présent contrat,

- le solde à l'achèvement des travaux, sur demande du BENEFICIAIRE et après transmission par celui-ci de l'Etat récapitulatif des Dépenses Acquittées (article 3.2) conformément au devis mentionné à l'article 1.3.

2.2.- Le montant de chacun des versements sera porté au crédit du compte n° FR7613907000008116818921548, ouvert au nom du BENEFICIAIRE à la / au Banque Populaire Loire et Lyonnais après la signature du présent contrat par les parties, et conformément aux dispositions de l'article I des conditions générales..

ARTICLE 3 - FIN DE DIFFERE DE REMBOURSEMENT

3.1.- La date de fin de différé de remboursement retenue est le 31/03/2016

3.2.- A cette date au plus tard, le BENEFICIAIRE devra adresser à Bpifrance Financement un Etat Récapitulatif des Dépenses Acquittées, certifié exact, daté et signé par l'expert-comptable ou l'agent comptable assignataire du BENEFICIAIRE. Un modèle d'état récapitulatif est annexé au présent contrat.

3.3.- Dans le cas où les documents et pièces justificatives fournies par le BENEFICIAIRE feraient apparaître des dépenses inférieures aux dépenses retenues dans l'assiette de l'aide, le montant de l'aide sera de plein droit réduit à 39,12 % du total des dépenses effectivement justifiées et retenues par Bpifrance Financement, le BENEFICIAIRE s'engageant à reverser sans délai l'indu éventuellement constate.

ARTICLE 4 - OBLIGATIONS DU BENEFICIAIRE

4.1.- Le BENEFICIAIRE s'engage à rembourser à Bpifrance Financement la somme de **750 000,00 €** suivant l'échéancier précisé ci-après :

4.1.1.- Echéancier:

17 500,00 € au plus tard le **31/12/2016**
17 500,00 € au plus tard le **31/03/2017**
17 500,00 € au plus tard le **30/06/2017**
17 500,00 € au plus tard le **30/09/2017**
35 000,00 € au plus tard le **31/12/2017**
35 000,00 € au plus tard le **31/03/2018**
35 000,00 € au plus tard le **30/06/2018**
35 000,00 € au plus tard le **30/09/2018**
40 000,00 € au plus tard le **31/12/2018**
40 000,00 € au plus tard le **31/03/2019**
40 000,00 € au plus tard le **30/06/2019**
40 000,00 € au plus tard le **30/09/2019**
45 000,00 € au plus tard le **31/12/2019**
45 000,00 € au plus tard le **31/03/2020**
45 000,00 € au plus tard le **30/06/2020**
45 000,00 € au plus tard le **30/09/2020**
50 000,00 € au plus tard le **31/12/2020**
50 000,00 € au plus tard le **31/03/2021**
50 000,00 € au plus tard le **30/06/2021**
50 000,00 € au plus tard le **30/09/2021**

4.1.2.- et, le cas échéant, au plus tard le 31/03 de chaque année, à compter du 01/01/2016, une annuité de remboursement égale à :

a) - 20,00 % du produit, hors taxes, des cessions ou concessions de licences - de brevets ou de savoir-faire - perçu au cours de l'année calendaire précédente lorsque lesdites cessions ou concessions portent sur tout ou partie des résultats du programme aidé

b) - 20,00 % du produit, hors taxes, généré par la commercialisation et notamment la vente à un tiers ou l'utilisation par le BENEFICIAIRE pour ses besoins propres des prototypes, pré-séries, maquettes, réalisés dans le cadre du programme aidé

Les sommes dues à Bpifrance Financement en application des alineas a) et b) du présent article 4.1.2, s'imputeront en priorité et à due concurrence sur l'ultime échéance due à Bpifrance Financement en application de l'article 4.1.1 et, le cas échéant, sur la penultième.

L'application du présent article 4.1.2 ne saurait amener le BENEFICIAIRE a rembourser a Bpifrance Financement une somme supérieure en principal au montant de l'aide qu'il a perçue.

4.2.- Par ailleurs, dans l'hypothése où le montant de l'avance effectivement versée par Bpifrance Financement serait inférieur à la somme figurant à l'article 1, les remboursements stipulés à l'article 4.1.1 et à l'article 4.3 seront réduits au prorata des sommes versées.

4.3.- En raison de la nature des travaux prévus au programme aidé, le BENEFICIAIRE profitera des résultats partiels ou indirects du programme pour une amélioration de ses produits ou plus généralement des technologies mises en oeuvre dans leur fabrication et/ou leur conception.

En conséquence, nonobstant l'echec ou le succès partiel du programme, le BENEFICIAIRE remboursera en tout état de cause à Bpifrance Financement une somme forfaitaire de **300 000,00** € payable suivant les modalités suivantes :

17 500,00 € au plus tard le **31/12/2016**
17 500,00 € au plus tard le **31/03/2017**
17 500,00 € au plus tard le **30/06/2017**
17 500,00 € au plus tard le **30/09/2017**
35 000,00 € au plus tard le **31/12/2017**
35 000,00 € au plus tard le **31/03/2018**
35 000,00 € au plus tard le **30/06/2018**
35 000,00 € au plus tard le **30/09/2018**
40 000,00 € au plus tard le **31/12/2018**
40 000,00 € au plus tard le **31/03/2019**
10 000,00 € au plus tard le **30/06/2019**

4.4.- Le BENEFICIAIRE pourra rembourser le montant de l'aide versée par anticipation.

4.5.- Le BENEFICIAIRE sera délié de tous ses engagements et obligations lui incombant au titre du présent contrat dès qu'il aura remboursé en totalité la somme prévue en 4.1, sous réserve de ce qui suit :

dans l'hypothèse où, au cours de l'exécution du présent contrat, il apparaîtrait que le montant de l'aide allouée excède l'intensité d'aide autorisée par l'Encadrement communautaire 2006/C 323/01 publié au JOUE du 30 décembre 2006, le BENEFICIAIRE s'engage à rembourser à Bpifrance Financement, à sa demande, l'indu ainsi perçu.

ARTICLE 5 — ECHEC TECHNIQUE, SUCCES TECHNIQUE PARTIEL

5.1. Un constat d'échec technique ou de succès technique partiel du programme pourra être demandé par le BENEFICIAIRE à Bpifrance Financement. Les éventuelles difficultés financiéres du BENEFICIAIRE ne peuvent pas être un motif de demande de constat d'échec technique ou de succés technique partiel du programme.
La demande du BENEFICIAIRE, qui devra être adressée à Bpifrance Financement au plus tard à la date de fin de différé de remboursement fixée à l'article 3, devra être accompagnée des documents suivants :

- un rapport technique de fin de programme rendant compte de son exécution et de ses résultats.
- un état récapitulatif des dépenses acquittées, certifié exact par l'expert-comptable ou l'agent comptable assignataire du bénéficiaire, daté et signé par le BENEFICIAIRE. Un modèle d'état récapitulatif est annexé au présent contrat,
- ses derniers bilans, comptes de résultats et annexes depuis la date d'enregistrement de la demande d'aide.

5.2. Dans le cadre d'une demande de constat d'échec technique ou de constat de succès technique partiel faite par le BENEFICIAIRE, et au vu des éléments fournis par le BENEFICIAIRE, complétés par tous les éléments explicatifs que Bpifrance Financement jugera utiles, Bpifrance Financement déterminera soit le succès technique, soit le succès technique partiel, soit l'échec du programme.

5.3. a) En cas d'échec technique prononcé par Bpifrance Financement, le BENEFICIAIRE ne se trouvera délié de tous engagements et obligations lui incombant au titre du présent contrat, à l'exception des articles II.6, II.7 et VI des conditions générales qu'a condition qu'il ait rempli tous les engagements et obligations lui incombant jusqu'à la date du constat d'échec et qu'il ait satisfait aux obligations figurant à l'article 4.3.

b) En cas de succès technique partiel du programme prononcé par Bpifrance Financement, les conditions de remboursement de l'aide visées à l'article 4 pourront, le cas échéant, être adaptées par Bpifrance Financement par voie d'avenant.

c) Le coût des contrôles de dépenses et expertises, internes ou externes, qui pourront être diligentées par Bpifrance Financement pour instruire la demande de constat d'échec du BENEFICIAIRE sera imputé sur le montant de l'aide, ou refacturé au BENEFICIAIRE, qui s'oblige à leur paiement.

5.4. En l'absence de demande de constat d'échec technique ou de constat de succès technique partiel accompagnée des documents justificatifs prévus à l'article 5.1 ci-dessus avant la date de fin de différé de remboursement fixée à l'article 3, le succès technique total du programme sera réputé acquis et le remboursement de l'aide s'effectuera alors conformément aux stipulations de l'article 4.

ARTICLE 6 — PRELEVEMENTS SEPA

Toutes les sommes dues par le BENEFICIAIRE au titre de l'aide seront payées par mandat de prélèvement SEPA au profit de Bpifrance Financement sur le compte bancaire ou postal du BENEFICIAIRE.

A cette fin, le BENEFICIAIRE s'engage à maintenir au profit de Bpifrance Financement, pendant toute la durée du remboursement de la somme prévue à l'article 4.1, la faculté de procéder au prélèvement SEPA de toutes sommes dues sur le compte bancaire ou postal désigné sur le mandat remis préalablement à la signature du présent contrat d'aide à l'innovation ; le BENEFICIAIRE reconnaît et accepte que le premier prélèvement puisse être présenté par Bpifrance Financement, sous réserve du respect d'un délai minimum de 5 (cinq) jours ouvrés à compter de la date de signature du présent contrat.

En cas de changement de références bancaires ou postales, il devra en informer Bpifrance Financement au moins un mois avant la date de la prochaine échéance et joindre à cette demande un nouveau relevé d'identité bancaire.

ARTICLE 7 - PIECES CONTRACTUELLES

Les piàces contractuelles dont le BENEFICIAIRE reconnaît avoir pris connaissance et auxquelles il adhàre sont : les présentes conditions particulières, les conditions générates d'octroi de l'aide, le devis du programme hors taxes, le modèle d'état récapitulatif des dépenses et le mandat de prélèvement SEPA.

ARTICLE 8 — LOI APPLICABLE

La loi applicable au présent contrat est la loi française.

ARTICLE 9 - ATTRIBUTION DE JURIDICTION

Les Tribunaux de Paris seront seuls compétents pour toute contestation relative au présent contrat.

Alizé Pharma SAS
15, chemin du Saquin - Bât. G
F - 69130 ECULLY
RCS Lyon 497 575 621

Fait à Lyon
En deux exemplaires, le 27/01/2014

Le BENEFICIAIRE
Représenté par la Sari TAB CONSULTING
Agissant en qualité de Président,
Elle-même représentée par Monsieur THIERRY ABRIBAT, agissant en qualité de Gérant

Bpifrance Financement
Corinne PERRET-HONEGGER
Agissant en qualité de Responsable du Service Innovation et Immatériel

Annexes :

- Devis du programme hors taxes,
- Conditions générales d'octroi de l'aide,
- Modèle d'état récapitulatif des dépenses,
- Mandat de prélèvement SEPA.

OSEO innovation Bénéficiaire : **Alizé pharma I** Contrat n° : **A1308020V**

Durée du programme prévue par le Bénéficiaire (en mois) : **18**

Aide à l'innovation Entreprise

Devis du programme d'innovation - Montants en Euros HT

Nature des dépenses	Prix de l'heure (1)	Etape 1 Du 01-oct.-13 au 31-mai-14 RI Nb h	RI Montant	DE Nb h	DE Montant	Etape 2 Du 01-juin-14 au 31-mars-15 RI Nb h	RI Montant	DE Nb h	DE Montant	Etape 3 Du au RI Nb h	RI Montant	DE Nb h	DE Montant	TOTAL RI	TOTAL DE	TOTAL
Frais de personnel existant																
Ingénieur (resp. affaire regle et chef de projet)	48,00		—	429	20 592,00		—	536	25 728,00		—		—	—	46 320,00	46 320,00
Ingénieur (pharmacologie)	42,00		—	161	6 762,00		—	201	8 442,00		—		—	—	15 204,00	15 204,00
Cadre	50,00		—	536	26 800,00		—	670	33 500,00		—		—	—	60 300,00	60 300,00
Cadre	88,00		—	643	56 584,00		—	804	70 752,00		—		—	—	127 336,00	127 336,00
Frais de personnel recruté pour le projet																
Ingénieur (chef projet clinique)	56,00		—	643	36 008,00		—	804	45 024,00		—		—	—	81 032,00	81 032,00
S/T FRAIS DE PERSONNEL			—		**146 746,00**		—		**183 446,00**		—		—	—	**330 192,00**	**330 192,00**
Frais généraux forfaitaires (20% des frais de personnel)			—		29 349,20		—		36 689,20		—		—	—	66 038,40	66 038,40
S/T FRAIS GENERAUX ET ACHATS			—		**29 349,20**		—		**36 689,20**		—		—	—	**66 038,40**	**66 038,40**
Atlanbio					42 750,00				49 375,00					—	92 125,00	92 125,00
BERTIN					57 704,00				64 167,00					—	121 871,00	121 871,00
Entreprises (Quitiles CRO phase 1)					562 514,00				744 422,00					—	1 306 936,00	1 306 936,00
S/T PRESTATIONS ET SOUS-TRAITANCE			—		**662 968,00**		—		**857 964,00**		—		—	—	**1 520 932,00**	**1 520 932,00**
TOTAL par étape : RI puis DE			—		**839 063,20**		—		**1 078 099,20**		—		—	—	**1 917 162,40**	**1 917 162,40**
CUMUL par étape				**Etape1 :**	**839 063,20**			**Etape 2:**	**1 078 099,20**			**Etape 3 :**	—			

(1): Taux Horaire Direct = (Salaires bruts annuels (d'après DAS) + Charges sociales) / 1607 heures

Conditions générales d'octroi de l'aide Bpifrance Financement Juillet 2013

CONDITIONS GENERALES D'OCTROI DE L'AIDE

ARTICLE I - VERSEMENT DE L'AIDE

I -1 - Le versement des fonds sera suffisamment constaté par les écritures comptables de Bpifrance Financement.

I - 2 - Bpifrance Financement ne sera pas tenu de verser tout ou partie du montant de l'aide si l'un ou l'autre des cas visés à l'article VI ci-aprés vient à se produire ou si Bpifrance Financement estime que l'évolution de la capacité technique et/ou financière du BENEFICIAIRE ne lui permet pas de mener à bien l'exécution du programme.

En outre, Bpifrance Financement ne sera tenu à aucun versement en cas de non exécution des engagements du BENEFICIAIRE souscrits au titre d'autres contrats conclus par lui avec Bpifrance Financement.

Par ailleurs, si des événements extérieurs ayant un caractère de force majeure viennent remettre en cause l'intérêt économique du programme faisant l'objet de l'aide, ou si des changements fondamentaux interviennent dans le statut (voir article II.9) ou le contrôle du BENEFICIAIRE (voir article II.8), la situation ainsi créée sera examinée par Bpifrance Financement qui pourra modifier les décisions initiales.

I. 3 - Bpifrance Financement ne sera tenu aux versements des montants de l'aide que dans la limite des crédits budgétaires de paiement disponibles mis à sa disposition par l'Etat pour gérer la procédure d'Aide à l'lnnovation. Le cas échéant, Bpifrance Financement informera le BENEFICIAIRE de cette situation dans les meilleurs délais.

1.4- Le BENEFICIAIRE réglera à Bpifrance Financement une commission de risque dont le montant s'élève à 3 % (non soumise à TVA) de l'avance remboursable accordée. Ce réglement sera retenu en totalité lors du premier versement de l'aide. Cette commission demeurera acquise en totalité à Bpifrance Financement, quel que soit le montant total de l'aide décaissée. Elle sera reversée au fondsd'intervention.

ARTICLE II - OBLIGATIONS DIVERSES DU BENEFICIAIRE

Le BENEFICIAIRE certifie par les présentes qu'il est en règie vis à vis de ses obligations fiscales et sociales en application de l'article 4 du décret n° 97-682 du 31 mai 1997, et s'engage, en outre :

II. 1 - à affecter exclusivement l'aide accordée par les présentes aux dépenses prévues dans le programme d'innovation et réalisées postérieurement à la date d'enregistrement de la demande ; à cet effet, le BENEFICIAIRE s'engage à dépenser la totalité des sommes qui lui incombent conformément au devis annexé,

II. 2 - à ne pas suspendre, ni abandonner la réalisation du programme sans en informer au préalable Bpifrance Financement,

II. 3 - à tenir Bpifrance Financement immédiatement informé des difficultés ou des événements sérieux et imprévus susceptibles de retarder, voire d'interrompre, l'exécution du programme,

II. 4 - à fournir, à la demande de Bpifrance Financement, toute information complémentaire sur l'exploitation des résultats du programme,

II. 5 - à se soumettre au contrôle qui sera opéré sur le plan technique et sur le plan financier par Bpifrance Financement, ou tous représentants accrédités par Bpifrance Financement, ainsi qu'à donner toutes facilités pour l'exercice de ce contrôle, notamment en ce qui concerne les vérifications sur piéces et sur place. En cas d'association, le BENEFICIAIRE se porte fort pour ses associés du respect de la présente clause,

II. 6 - à faire connaître à Bpifrance Financement toute prise de brevet en France et à l'étranger relative au programme d'innovation aidé et à ne pas abandonner les brevets précités sans avoir mis Bpifrance Financement en mesure de les reprendre gratuitement à son nom au moins deux mois avant l'échéance. En cas de reprise desdits brevets par Bpifrance Financement, ces derniers ne seront pas opposables au BENEFICIAIRE,

II. 7- à ne pas procéder à l'aliénation, la cession, la concession, l'apport ou la transmission à titre quelconque, directement ou indirectement, à titre gratuit, à titre onéreux ou même à titre de réciprocité, des moyens nécessaires soit à la réalisation du programme aidé, spécialement des brevets, precédés de fabrication ou résultats techniques divers, soit à la commercialisation des produits de ce programme, sans avoir obtenu l'accord préalable de Bpifrance Financement,

II. 8 - à communiquer à Bpifrance Financement, dès qu'elles se produisent, toutes modifications dans la répartition du capital social du BENEFICIAIRE, dès qu'elles aboutissent à un changement dans le contrôle du BENEFICIAIRE, ainsi que tout projet de fusion ou de scission,

II. 9 - à communiquer à Bpifrance Financement, dès qu'elles se produisent, toutes modifications dans le statut du BENEFICIAIRE (notamment la forme juridique, l'objet social, le montant du capital), de même qu'à informer Bpifrance Financement de toute procédure prononçant la sauvegarde, le redressement judiciaire ou la liquidation judiciaire du BENEFICIAIRE,

II. 10 - à faire connaître l'aide accordée par Bpifrance Financement chaque fois que le BENEFICIAIRE fera une campagne de presse sur le programme et ses résultats. Passée une période de cinq années à compter de la date de signature du contrat d'aide, Bpifrance Financement pourra publier les informations sur le programme aidé, sauf si le BENEFICIAIRE s'y oppose par écrit.

ARTICLE III - COMPTABILITE

III. 1 - Le BENEFICIAIRE tiendra une comptabilité sur laquelle figureront tous éléments nécessaires à l'évaluation précise des dépenses et recettes visées à la présente convention, à savoir:

- les dépenses effectuées conformément à l'assiette de l'aide (factures externes ou documents analytiques internes),

- les recettes encaissées pour le versement des annuités dues à Bpifrance Financement (produits de cessions ou de concessions de licences de brevets ou de savoir-faire, commercialisation de prototypes - maquettes -préséries).

Cette comptabilité ainsi que les éléments de comptabilité générate s'y rapportant seront tenus à la disposition de Bpifrance Financement ou d'un représentant accrédité par lui dans les 15 jours de la demande formulée par Bpifrance Financement pendant une durée de dix ans à compter du dernier versement de l'aide.

III. 2-Toutes les sommes dues au titre de l'aide objet des présentes seront prélevées par Bpifrance Financement sur le compte bancaire du BENEFICIAIRE.

ARTICLE IV - ECHEC COMMERCIAL, SUCCES COMMERCIAL PARTIEL

IV. 1 -Le constat d'échec commercial ou de succès commercial partiel du programme pourra être demandé par le BENEFICIAIRE à Bpifrance Financement.

Il appartiendra au BENEFICIAIRE de faire savoir, notamment, les moyens humains et techniques, financiers et commerciaux qu'il a déployés pendant un délai raisonnable pour commercialiser avec succès les résultats du programme, étant précisé que :

- les difficultés financières du BENEFICIAIRE ne permettent pas de justifier la demande
- l'état récapitulatif des dépenses produit par le BENEFICIAIRE devra être attesté par son commissaire aux comptes, un expert comptable ou son agent comptable.

Bpifrance Financement pourra, au vu des éléments fournis par le BENEFICIAIRE, prononcer soit le constat d'échec commercial du programme, soit le succès commercial partiel du programme.

IV. 2 -a) En cas d'échec commercial prononcé par Bpifrance Financement, le BENEFICIAIRE se trouvera délié de tous engagements et obligations lui incombant au titre du présent contrat, à l'exception des articles II.6 et II.7 des Conditions Générates, sous réserve qu'il ait rempli tous les engagements et obligations lui incombant jusqu'à la date du constat d'echec. Les sommes déjà versées ou dues par le BENEFICIAIRE en application de l'article 4 des Conditions Particulières resteront acquises à Bpifrance Financement en tout état de cause et à titre définitif.

b) En cas de succès commercial partiel du programme prononcé par Bpifrance Financement, les conditions de remboursement de l'aide visées à l'article 4 des Conditions Particuliéres pourront, le cas échéant, être adaptées par Bpifrance Financement.

c) Le coût des contrôles de dépenses et expertises, internes ou externes, qui pourront être diligentées par Bpifrance Financement pour instruire la demande de constat d'échec du BENEFICIAIRE sera imputé sur le montant de l'aide, ou refacturé au BENEFICIAIRE, qui s'oblige à leur paiement.

ARTICLE V - REPRISE DU PROGRAMME

En cas d'échec ou de succès partiel, d'abandon ou de non exploitation des résultats du programme aidé dans un délai de 4 ans suivant la date de signature du présent contrat, et dans la mesure où il n'a pas remboursé la totalité de l'aide, le BENEFICIAIRE ne pourra s'opposer à la reprise par Bpifrance Financement, ou par un tiers designé par Bpifrance Financement, de tout ou partie de la propriété industrielle, des résultats de toute nature, des maquettes ou prototypes réalisés au titre du programme aidé et, d'une façon générale, le BENEFICIAIRE ne pourra s'opposer à la reprise du programme par d'autres entreprises. L'application de cette clause sera faite dans un esprit de concertation afin de préserver au mieux les intérêts du BENEFICIAIRE et l'intérêt général.

ARTICLE VI — REVERSEMENT DE L'AIDE ET REPETITION DE L'INDU

VI. 1 -La présente aide donnera lieu de plein droit à reversement de l'aide en cas de cession - totale ou partielle -ainsi qu'en cas de cessation d'activité, de dissolution ou de liquidation amiable du BENEFICIAIRE.

En cas de solidarité entre plusieurs BENEFICIAIRES, le jugement d'ouverture d'une procédure de sauvegarde, de redressement judiciaire ou de liquidation judiciaire prononcé à l'encontre d'un des BENEFICIAIRES entraînera de plein droit le reversement de l'aide auprès du ou des autres BENEFICIAIRES. Il en sera de même en cas de cessation d'activité, de dissolution ou de liquidation amiable d'un des BENEFICIAIRES.

VI. 2 -A la seule initiative de Bpifrance Financement, la présente aide donnera lieu au reversement de l'aide pour la totalité de son montant dans l'un ou l'autre des cas suivants :
a- inobservation par le BENEFICIAIRE de l'une quelconque de ses obligations résultant des présentes,
b- situation non régulière du BENEFICIAIRE au regard de ses obligations sociales et fiscales,
c- déclarations inexactes ou mensongères du BENEFICIAIRE,
d- inachèvement ou abandon du programme constaté par Bpifrance Financement.

e- résiliation anticipée, pour queique cause que ce soit, de tout contrat concédant au BENEFICIAIRE des droits d'exploitation sur des techniques, produits ou procédés mis en œuvre pour la réalisation du programme aidé, et/ou nécessaires à la commercialisation des résultats en découlant

VI. 3-Dans le cas où les documents et pièces justificatives fournies par le BENEFICIAIRE feraient apparaître des dépenses inférieures aux dépenses retenues dans l'assiette de l'aide, le montant de l'aide sera de plein droit réduit au prorata du total des dépenses effectivement justifiées et retenues par Bpifrance Financement, le BENEFICIAIRE s'engageant à reverser sans délai l'indu èventuellement constatè.

La répétition immédiate sera de droit, si Bpifrance Financement l'exige et sans qu'il y ait lieu à formalités judiciaires ou extrajudiciaires, la somme à verser étant alors égale à l'encours de l'aide augmenté, le cas échéant, de pénalités de retard au taux fixé à l'article VIII.

ARTICLE VII — INFORMATION DU COMITE D'ENTREPRISE

Lorsque l'aide accordée sous forme de prêt ou d'avance remboursable est d'un montant supérieur à 1 500 000 € ou sous forme de subvention d'un montant superieur à 200 000 €, le BENEFICIAIRE s'engage à informer et consulter son Comité d'Entreprise conformément aux dispositions de l'art — R 2323-7-1 du code du travail.
L'information et la consultation devront porter sur la nature, l'objet, le montant et les conditions de versement de l'aide accordée.
Le BENEFICIAIRE tiendra à disposition de Bpifrance Financement les justificatifs suivants : convocation du CE, éléments d'information fournis au CE et compte-rendu dudit CE.
Le BENEFICIAIRE est informé que l'absence récurrente ou persistante du respect des obligations ci-dessus définies est susceptible de conduire Bpifrance Financement à exiger le reversement partiel ou total de l'aide.

ARTICLE VIII — PENALITES DE RETARD

Toute somme non versee dans les délais contractuels sera majorée de pénalités de retard au taux de 0,7 % (zéro sept pour cent) par mois calendaire de retard.

ARTICLE IX — AUTORISATION DE TRANSMISSION D'INFORMATIONS

Le BENEFICIAIRE autorise Bpifrance Financement à transmettre aux autres entités du groupe Bpifrance, ainsi qu'à l'Etat et aux Collectivités Territoriales et de maniere générale à tous bailleurs de fonds, intervenant directement ou indirectement au financement de la présente demande d'aide, les informations relatives au BENEFICIAIRE, au programme aidé, et au montant de l'aide accordée. Ces éléments seront également fournis à la Commission Européenne, ainsi que des informations sur l'intensite de l'aide et sur le secteur d'activite concerné, dans le cadre des rapports annuels qui doivent lui être fournis. De maniere generale, Bpifrance Financement est autorisé par le BENEFICIAIRE à communiquer à la Commission Européenne tous les éléments d'information nécessaires à l'exercice de son controle en matière d'aides d'Etat.

ARTICLE X — PROTECTION DES DONNEES A CARACTERE PERSONNEL

Les informations nominatives recueillies dans le cadre du present acte sont obligatoires pour le traitement et la gestion de l'opération en cause et en particulier pour son traitement informatique effectué sous la responsabilité de Bpifrance Financement. Elles pourront egalement, de convention expresse et à défaut d'opposition, être utilisées ou communiquées aux mêmes fins aux autres personnes morales du Groupe, ses partenaires, intermédiaires, courtiers et assureurs voire à des tiers ou sous-traitants dans la limite nécessaire à l'exécution des prestations concernées. Vous pouvez vous opposer, sans frais, à ce que les données vous concemant soient utilisées à des fins de prospection, notamment commerciale.

Conformement aux dispositions de la loi N°78-17 du 6 janvier 1978 et des lois subséquenf.es relatives à l'informatique, aux fichiers et libertés, vous bénéficiez d'un droit d'accès, de rectification, de suppression et d'opposition aux informations vous concernant que vous pouvez exercer par l'envoi d'un courrier à Bpifrance Financement, Direction des Systèmes d'information, service SIAQ, au 27/31 avenue du Général Leclerc -94710-Maisons-Alfort Cedex.

ARTICLE XI — PREVALENCE DES CONDITIONS PARTICULIERES

En cas d'opposition entre les présentes conditions générales et particulières, les conditions particulières prévalent

MODELE A PARAPHER

bpifrance

ETAT RECAPITULATIF DES DEPENSES ACQUITTEES
ET ATTESTATION DE REGULARITE FISCALE ET SOCIALE

Entreprise bénéficiaire :	0
Contrat n° :	0
Date de réception de la demande d'alde :	00/01/1900
Date de prise en compte des dépenses :	00/01/1900
Date de fin de différé de remboursement ou date de fin de programme (cf. contrat) :	00/01/1900

Veuillez trouver ci-dessous le récapitulatif, résumé par catégorie, des dépenses acquittées, conformément au devis annexé au contrat d'aide.

	Etape 1 du au	Etape 2 du au	Etape 3 du au	TOTAL
Dépenses internes :				
Frais de personnel	—	—	—	—
Frais généraux forfaitaires	—	—	—	—
Achats et Consommables HT	—	—	—	—
SOUS TOTAL DEPENSES INTERNES	—	—	—	—
Prestations extemes et sous-traitances HT	—	—	—	—
SOUS TOTAL PRESTATIONS EXTERNES	—	—	—	—
Investissements, amortissements et autres HT :				
Investissements non récupérables	—	—	—	—
Amortissement invest. Récupérables	—	—	—	—
Autres frais spécifiques (sur justificatifs)	—	—	—	—
SOUS TOTAL INVESTISSEMENTS et AUTRES	—	—	—	—
TOTAL GLOBAL	—	—	—	—
Montant des dépenses prévues au devis annexé au contrat d'aide :				
Montant des dépenses acquittées par le Bénéficiaire (en euros) :				—

Cachet de l'entreprise

- **Le soussigné certifie sur l'honneur que le bénéficiaire du contrat d'aide susmentionné est en situation régulière au regard de ses obligations fiscales et sociales.**
- **Le soussigné certifie sur l'honneur l'exactitude des informations indiquées dans le présent état récapitulatif des dépenses.**

Fait à :
En date du :
Nom et qualité du signataire des présentes ayant pouvoir de contracter :
Signature :

Certification par l'expert-comptable ou par l'Agent Comptable assignataire pour les bénéficiaires publics.

- Le soussigné certifie l'exactitude des informations indiquées dans le présent état récapitulatif

Fait à :
En date du :
Nom et qualité du signataire (Expert-Comptable ou Agent Comptable assignataire)
Signature :

mai-12

[ILLEGIBLE]

Nota : Cet état récapitulatif des dépenses acquittées dans le cadre du programme d'innovation conduit par le Bénéficiaire et soutenu par Bpifrance Financement, est issu d'un fichier informatique constitué de plusieurs onglets à compléter, répertoriant les différentes catégories de coût, selon le devis annexé au contrat :

- onglet Frais de personnel (incluant les frais généraux forfaitaires)
- onglet Achats et Consommables
- onglet Prestations extemes et Sous-traitances
- onglet Investissements, amortissements et autres

Cet outil informatique vous permettra de suivre les dépenses réalisées dans le cadre de ce programme d'innovation et d'établir le récapitulatif des dépenses. **La version électronique de cet outil informatique vous sera transmise sur simple demande par mail à l'interlocuteur du Service de Gestion Innovation et Immatériel en charge de la gestion et du suivi de votre dossier d'aide.**

Exhibit 10.48

Bpifrance Sud-Est
186 avenue Thiers
69465 Lyon Cedex 06

CONTRACT no. A1308020 V

Between:

1. **Bpifrance Financing**
   A public corporation with a share capital of 750,860,784 euros
   Trade & Corporate Register (RCS) of Créteil number 320 252 489
   Headquartered at 27-31, avenue du General Leclerc - 94710 MAISONS-ALFORT Cedex
   Represented by Corinne PERRET-HONEGGER, as Head of the Innovation and Intangibles Department, hereinafter referred to as "Bpifrance Financement"

Party of the first part,

and:

2. **ALIZE PHARMA**
   A private corporation with a share capital of 110,894,00 euros
   SIRET no.: 49757562100022
   ESPACE EUROPÉEN
   15 CHEMIN DU SAQUIN
   69130 ECULLY
   Represented by SARL TAB CONSULTING, as CEO, in turn represented by THIERRY ABRIBAT, in his capacity as Manager
   Hereinafter referred to as the "BENEFICIARY"

Party of the second part,

Having regard to Decree no. 97-682 of May 31, 1997, pertaining to aid for innovation;

Having regard to order no. 2005-722 of June 29, 2005, amended, pertaining to the creation of the public establishment OSEO and the public corporation named OSEO;

Having regard to community framework for state aid for research, development and innovation no. 2006/C 323/01 published in the Official Journal of the European Union (OJEU) of December 30, 2006;

Having regard to the State aid system N408/2007 of intervention of OSEO innovation for research, development and innovation dated January 17, 2008;

Having regard to Articles 60 to 64 of Law no. 2010-1249 of October 22, 2010 pertaining to banking and financial regulations;

Having regard to Decree no. 2010-1672 of December 28, 2010, approving the articles of association of the public corporation named OSEO and bearing various provisions relating to its operation;

Having regard to the decision of the Shareholders' Meeting of OSEO SA dated July 12, 2013, changing the name from OSEO SA to Bpifrance Financement SA;

Having regard to decree no. 2013-637 of July 12, 2013 approving the articles of association of the corporation of Bpifrance Financement;

Having regard to the request for innovation aid submitted by the BENEFICIARY and registered on 07/18/2013 number A1308020 V;

Having regard to the technical and financial instructions carried out in accordance with Article 7 of decree no. 97-682 referred to above;

SPECIAL TERMS AND CONDITIONS FOR GRANTING AID

ARTICLE 1 - AMOUNT, OBJECT AND FORM OF THE AID

1.1. Bpifrance Financement grants to the BENEFICIARY, under the payment terms and conditions provided for in Article 2, an innovation aid of **€ 750,000.00**.
This aid is allocated to the program referred to in the introduction made by the BENEFICIARY and aimed at:

Phase 1b clinical trial in type 2 diabetic patients for AZP - 531.

1.2. In return for this aid, the BENEFICIARY agrees to carry out the program presented within 18 months, from 07/18/2013, and to implement all human, technical, financial and commercial means necessary for the success of its execution and the commercial exploitation of its results.

1.3. The estimated total amount of the program presented is **€ 1,917,162.40** excluding taxes.
The innovation program expenditure included in the aid base amounts to: **€ 1,917,162.40** excluding taxes, according to the attached estimate.
As a result, the amount provided for above represents 39.12% of the total expenditure, excluding taxes, included in the innovation aid base. This aid is granted to the BENEFICIARY in the form of a reimbursable advance.

ARTICLE 2 — PAYMENT TERMS AND CONDITIONS OF THE AID

2.1. The funds will be made available to the BENEFICIARY in 2 installments:

- an amount of € 500,000.00 after the date this contract is signed,
- the balance upon completion of the work, upon request of the BENEFICIARY and after transmission of the Summary Statement of Expenses Paid (Article 3.2) in accordance with the estimate mentioned in Article 1.3.

2.2. The amount of each payment will be credited to account number FR7613907000008116818921548, opened in the name of the BENEFICIARY at the Banque Populaire Loire et Lyonnais after this contract is signed by the parties, in accordance with the provisions of Article I of the General Terms and Conditions.

ARTICLE 3 - END OF DEFERRED REIMBURSEMENT PERIOD

3.1. The end date of the deferred reimbursement period is 03/31/2016

3.2. By this date at the latest, the BENEFICIARY must send to Bpifrance Financement a Summary Statement of Expenses Paid, certified as accurate, dated and signed by the BENEFICIARY's accountant or the designated accountant. A summary statement form is attached to this contract.

3.3. In the event the documents and vouchers provided by the BENEFICIARY reveal expenses less than the expenditure set down in the aid base, the amount of the aid will automatically be reduced to 39.12% of the total expenses effectively substantiated and determined by Bpifrance Financement; the BENEFICIARY agrees to immediately reimburse any money paid without just cause that is observed.

ARTICLE 4 - BENEFICIARY'S OBLIGATIONS

4.1. The BENEFICIARY agrees to reimburse Bpifrance Financement the sum of 750,000.00 € according to the following schedule:

4.1.1. Schedule:

€ 17,500.00 by **12/31/2016**
€ 17,500.00 by **03/31/2017**
€ 17,500.00 by **06/30/2017**
€ 17,500.00 by **09/30/2017**
€ 35,000.00 by **12/31/2017**
€ 35,000.00 by **03/31/2018**
€ 35,000.00 by **06/30/2018**
€ 35,000.00 by **09/30/2018**
€ 40,000.00 by **12/31/2018**
€ 40,000.00 by **03/31/2019**
€ 40,000.00 by **06/30/2019**
€ 40,000.00 by **09/30/2019**
€ 45,000.00 by **12/31/2019**
€ 45,000.00 by **03/31/2020**
€ 45,000.00 by **06/30/2020**
€ 45,000.00 by **09/30/2020**
€ 50,000.00 by **12/31/2020**
€ 50,000.00 by **03/31/2021**
€ 50,000.00 by **06/30/2021**
€ 50,000.00 by **09/30/2021**

4.1.2. and, if applicable, no later than 03/31 of each year, starting from 01/01/2016, a reimbursement annuity equal to:

a) - 20.00% of the proceeds, excluding taxes, from assignments or concessions of licenses, patents or know-how collected during the previous calendar year when the said assignments or concessions relate to all or part of the results of the program being aided;
b) 20.00% of the product, excluding taxes, generated by the marketing and in particular the sale to a third party or the use by the BENEFICIARY for its own needs prototypes, pre-series, models, made under the program being aided.

The sums owed to Bpifrance Financement pursuant to paragraphs a) and b) of this Article 4.1.2, will be charged in priority and as owed on the last amount owed to Bpifrance Financement pursuant to Article 4.1.1 and, if applicable, on the penultimate installment.

The application of this Article 4.1.2 cannot lead the BENEFICIARY to reimburse Bpifrance Financement a sum greater in principal than the amount of the aid that it has received.

4.2. In addition, in the event the amount of the advance actually paid by Bpifrance Financement is less than the sum indicated in Article 1, the reimbursements stipulated in Article 4.1.1 and Article 4.3 will be reduced in proportion to the sums paid.

4.3. Due to the nature of the work planned for the program being aided, the BENEFICIARY will benefit from the partial or indirect results of the program for an improvement of its products or more generally of the technologies implemented in their manufacture and/or their design.

Consequently, notwithstanding the failure or partial success of the program, the BENEFICIARY will in any case reimburse Bpifrance Financement a lump sum of € 300,000.00 payable according to the following terms and conditions:

€ 17,500.00 by **12/31/2016**
€ 17,500.00 by **03/31/2017**
€ 17,500.00 by **06/30/2017**
€ 17,500.00 by **09/30/2017**
€ 35,000.00 by **12/31/2017**
€ 35,000.00 by **03/31/2018**
€ 35,000.00 by **06/30/2018**
€ 35,000.00 by **09/30/2018**
€ 40,000.00 by **12/31/2018**
€ 40,000.00 by **03/31/2019**
€ 10,000.00 by **06/30/2019**

4.4. The BENEFICIARY may refund the amount of the advance payment aid.

4.5. The BENEFICIARY will be released from all its commitments and obligations incumbent on it under this contract as soon as it has paid in full the amount provided for in 4.1, subject to the following:

in the event that, during the performance of this contract, it appears that the amount of the aid allocated exceeds the aid intensity authorized by Community Framework 2006/C 323/01 published in the JOUE of December 30, 2006, the BENEFICIARY agrees to reimburse Bpifrance Financement, at its request, the money paid without just cause thus received.

ARTICLE 5 - TECHNICAL FAILURE, PARTIAL TECHNICAL SUCCESS

5.1. A statement of technical failure or partial technical success of the program may be requested by the BENEFICIARY from Bpifrance Financement. The possible financial difficulties of the BENEFICIARY cannot be grounds for requesting a declaration of technical failure or partial technical success of the program.

The BENEFICIARY's request, which must be sent to Bpifrance Financement no later than the date of the end of the payment deferred period established in Article 3, must be accompanied by the following documents:

- a technical end-of-program report providing an account of its execution and results.
- a summary statement of the expenses paid, certified as accurate by the accountant or the designated accounting officer of the beneficiary, dated and signed by the BENEFICIARY. A summary statement form is attached to this contract,
- its latest financial statements, profit and loss accounts and schedules since the date of the application for aid is registered.

5.2. In the context of a request for a technical failure or a partial technical success report made by the BENEFICIARY, and in view of the information provided by the BENEFICIARY, supplemented by all the explanatory information that Bpifrance Financement considers appropriate, Bpifrance Financement will determine either technical success or partial technical success, or the failure of the program.

5.3. a) In the event of a technical failure determined by Bpifrance Financement, the BENEFICIARY will not be released from all commitments and obligations incumbent on it under this contract, with the exception of Articles II.6, II.7 and VI of the General Terms and Conditions provided it has fulfilled all the commitments and obligations incumbent upon it up until the date of the determination of failure and that it has fulfilled the obligations set out in Article 4.3.

b) In the event of a partial technical success of the program determined by Bpifrance Financement, the reimbursement conditions of the aid referred to in Article 4 may, if applicable, be adapted by Bpifrance Financement by amendment.

c) The cost of internal and external expenditure and expert assessments, which may be requested by Bpifrance Financement to process the BENEFICIARY's claim for failure, will be charged to the amount of the aid, or reinvoiced to the BENEFICIARY, that agrees to pay it.

5.4. In the absence of a request for a determination of technical failure or a partial technical success report accompanied by the support documents provided for in Article 5.1 above before the end of the deferred reimbursement period set in Article 3, the total technical success of the program shall be considered to have been acquired and the reimbursement of the aid shall be made in accordance with the provisions of Article 4.

ARTICLE 6 — SEPA LEVIES

All aid-related amounts owed by the BENEFICIARY will be paid by SEPA Direct Debit Order on behalf of Bpifrance Financement from the BENEFICIARY's bank or postal account.

To this end, the BENEFICIARY agrees to maintain on behalf of Bpifrance Financement, throughout the reimbursement period of the amount provided for in Article 4.1, the ability to make the SEPA direct debit of all amounts owed in the bank or postal account designated on the order given prior to the signing of this innovation aid contract; the BENEFICIARY acknowledges and agrees that the first withdrawal may be submitted by Bpifrance Financement, subject to compliance with a minimum period of 5 (five) working days from the date this contract is signed.

If the bank or postal account information changes, Bpifrance Financement must be informed thereof at least one month before the date of the next due date and attach a new bank account statement to this request.

ARTICLE 7 — CONTRACT DOCUMENTS

The contract documents that the BENEFICIARY acknowledges having read and to which it adheres are: these Special Terms and Conditions, the General Terms and Conditions of granting the aid, the estimate of the program excluding taxes, the summary statement form of the expenses and the SEPA Direct Debit order.

ARTICLE 8 - APPLICABLE LAW

The law applicable to this contract is French law.

ARTICLE 9 - JURISDICTION

The Courts of Paris will have sole jurisdiction for any dispute relating to this contract.

Alizé Pharma
Alizé Pharma SAS
15, chemin du Saquin — Building G
F — 69130 Ecully
NCS Lyon 497 575 621

Executed in Lyon
In two copies, on 01/24/2014

The BENEFICIARY
Represented by Sari TAB CONSULTING Acting as President, represented herself by Mr. THIERRY ABRIBAT, acting as Managing Director

Bpifrance Financement
Corinne Perret-Honegger
Acting in her capacity as Innovation and Intangibles Department Manager

Exhibits:

- Estimate of the program before taxes
- General terms and conditions for granting aid
- Summary of Expenses form
- SEPA debit order

OSEO Innovation | Beneficiary: Alizé Pharma I | Contract no.: A1308020V

Duration of the program anticipated by the beneficiary (in months): 18

Aid to Corporate Innovation | Innovation program estimate — Amounts in Euros before tax

		Phase 1 From 01-Oct.-13 To 31-May-14				Phase 2 From 01-June-14 To 31-March -15				Phase 3 From	To				
	Price/hour	RI		DE		RI		DE		RI		DE			
Description	(1)	Hours	Amount	Hours	Amount	Hours	Amount	Hours	Amount	Hours	Amount	Hours	Amount		TOTAL
Costs for existing staff															
Engineering (Business and project manager)	48.00			429	20,592.00			536	25,728.00					46,320.00	46,320.00
Engineer (pharmacology)	42.00		—	161	6,762.00		—	201	8,442.00		—		—	—	15,204.00	15,204.00
Manager	50.00		—	536	26,800.00		—	670	33,500.00		—		—	—	60,300.00	60,300.00
Manager	88.00		—	643	56,584.00		—	804	70,752.00		—		—	—	127,336.00	127,336.00
Costs of staff recruited for the project															
Engineer (clinical project manager)	56.00		—	643	36,008.00		—	804	45,024.00						81,032.00	81,032.00
PERSONNEL COSTS EXCLUDING TAX			—		146,746.00		—		183,446.00		—		—	—	330,192.00	330,192.00
General lump-sum costs (20% of staff costs)			—		29,349.20				36,689.20		—		—	—	66,038.40	66,038.40
GENERAL COSTS AND PURCHASES EXCLUDING TAX			—		29,349.20		—		36,689.20		—		—	—	66,038.40	66,038.40
Atlantic					42,750.00				49,375.00					—	92,125.00	92,125.00
BERTIN					57,704.00				64,167.00					—	121,871.00	121,871.00
Companies (Quitiles CRO phase 1)					562,514.00				744,422.00					—	1,306,936.00	1,306,936.00
SERVICES AND SUBCONTRACTING EXCLUDING TAX			—		662,968.00		—		857,964.00		—		—	—	1,520,932.00	1,520,932.00
TOTAL per phase: RI then DE			—		839,063.20		—		1,078,099.20		—		—	—	1,917,162.40	1,917,162.40
TOTAL per phase				Phase 1:	839,063.20			Phase 2:	1,078,099.20			Phase 3:	—		

(1) Direct hourly rate = (gross annual salaries (according to DAS) + social contributions) / 1607 hours

General Terms and Conditions for granting aid Bpifrance Financement July 2013

GENERAL TERMS AND CONDITIONS FOR GRANTING AID

ARTICLE I - PAYMENT OF THE AID

I.1. Payment of the funds will be sufficiently recorded by the accounting records of Bpifrance Financement.

I.2. Bpifrance Financement will not be required to pay all or part of the amount of the aid if any of the cases referred to in Article VI below occurs or if Bpifrance Financement considers that the evolution of the technical and/or financial capacity of the BENEFICIARY does not enable it to carry out the program.

In addition, Bpifrance Financement will not be responsible for any payment in the event the BENEFICIARY fails to fulfill the commitments signed under other contracts it has entered into with Bpifrance Financement.

Moreover, if events of Force Majeure jeopardize the economic interest of the program which is the object of the aid, or if fundamental changes occur in the status (see Article II.9) or the control of the BENEFICIARY (see Article II.8), the situation thus created will be examined by Bpifrance Financement, which may modify the initial decisions.

I.3. Bpifrance Financement will only be responsible for the payment of aid amounts within the limits of the available payment appropriations made available by the State to manage the Innovation Aid procedure. If necessary, Bpifrance Financement will inform the BENEFICIARY of this situation as soon as possible.

I.4. The BENEFICIARY will pay Bpifrance Financement a 3% commission of risk (not subject to VAT) of the reimbursable advance granted. This settlement will be maintained in full at the time of the first payment of the aid. This commission will remain fully acquired by Bpifrance Financement, regardless of the total amount of aid disbursed. It will be paid back to the intervention fund.

ARTICLE II. MISCELLANEOUS OBLIGATIONS OF THE BENEFICIARY

The BENEFICIARY hereby certifies that it is in good standing with respect to its tax and social obligations pursuant to Article 4 of Decree no. 97-682 of May 31, 1997, and further agrees:

II.1. to exclusively allocate the aid granted hereby to the expenses provided for in the innovation program and carried out after the date of registration of the request; to this end, the BENEFICIARY agrees to spend all the sums incumbent upon it in accordance with the attached estimate,

II.2. not to suspend or abandon the implementation of the program without first informing Bpifrance Financement,

II.3. to immediately inform Bpifrance Financement of the difficulties or serious and unforeseen events likely to delay or even interrupt the performance of the program,

II.4. to provide, at the request of Bpifrance Financement, any additional information on the exploitation of the results of the program,

II.5. to submit to the technical and financial audit conducted by Bpifrance Financement, or all representatives accredited by Bpifrance Financement, and to provide total assistance in for the exercise of this audit, in particular with regard to on-site and document checks. In the event of an association, the BENEFICIARY agrees to ensure the compliance of its partners with this clause,

II.6. to inform Bpifrance Financement of any patent taken out in France and abroad relating to the assisted innovation program and not to abandon the aforementioned patents without having enabled Bpifrance Financement to assume them at no charge in his name at least two months before the expiration. If Bpifrance Financement assumes said patents, they will not be enforceable against the BENEFICIARY,

II.7. not to proceed with the assignment, transfer, concession, contribution or transmission for any purpose, directly or indirectly, free of charge, for consideration or even by way of reciprocity, of the necessary means either for the performance of the program being aided, especially patents, manufacturing processes or various technical results, or the marketing of the products of this program, without having obtained the prior agreement of Bpifrance Financement,

II.8. to communicate to Bpifrance Financement, as soon as they occur, any changes in the distribution of the BENEFICIARY's share capital, as soon as they result in a change in the BENEFICIARY's control, as well as any planned merger or split,

II.9. to communicate to Bpifrance Financement, as soon as they occur, any changes in the status of the BENEFICIARY (including its legal form, corporate purpose, amount of share capital), as well as to inform Bpifrance Financement of any procedure announcing the court-ordered protection, reorganization or liquidation of the BENEFICIARY,

II.10. to make known the aid granted by Bpifrance Financement whenever the BENEFICIARY makes a press campaign on the program and its results. After five years from the date the aid contract is signed, Bpifrance Financement may publish the information on the program being aided, unless this is opposed by the BENEFICIARY in writing.

ARTICLE III — ACCOUNTING

III.1. The BENEFICIARY will keep accounts containing all information necessary for the precise evaluation of the expenses and revenues referred to in this agreement, i.e.:

- expenditure made in accordance with the basis of the aid (external invoices or internal analytical documents),
- receipts collected for the payment of annuities owed to Bpifrance Financement (proceeds from sales or licensing of patents or know-how, marketing of prototypes - mock-ups - pre-series).

This accounts as well as the related general accounting items will be made available to Bpifrance Financement or a representative accredited thereby within 15 days of the request made by Bpifrance Financement for ten years from the last payment of the aid.

III.2. All sums due for the purpose of this aid will be withdrawn by Bpifrance Financement from the bank account of the BENEFICIARY.

ARTICLE IV - COMMERCIAL FAILURE, PARTIAL COMMERCIAL SUCCESS

IV.1 — The acknowledgment of commercial failure or partial commercial success of the program may be requested by the BENEFICIARY from Bpifrance Financement.

It shall be the BENEFICIARY's responsibility to communicate, in particular, the human, technical, financial and commercial resources it has deployed during a reasonable period of time to successfully market the results of the program, with it being specified that:

- the financial difficulties of the BENEFICIARY do not justify the request;
- the summary statement of expenditure produced by the BENEFICIARY shall be certified by the Commissioner of accounts, an accountant or his accounting agent.

Bpifrance Financement may, on the basis of the information provided by the BENEFICIARY, either pronounce the commercial failure of the program or its partial commercial success.

IV.2. a) In the event of a commercial failure pronounced by Bpifrance Financement, the BENEFICIARY will be released from all commitments and obligations incumbent on it hereunder, with the exception of Articles II.6 and II.7 of the General Terms and Conditions, provided it has fulfilled all the commitments and obligations incumbent upon it as of the date the failure is ascertained. Sums already paid or owed by the BENEFICIARY pursuant to Article 4 of the Special Terms and Conditions will remain with Bpifrance Financement in any event and definitively.

b) In the event of partial commercial success of the program pronounced by Bpifrance Financement, the conditions of reimbursement of the aid referred to in Article 4 of the Special Terms and Conditions may, if necessary, be adapted by Bpifrance Financement.

c) The cost of internal and external expenditure and expert report audits, which may be requested by Bpifrance Financement to process the BENEFICIARY's claim for failure, will be charged to the amount of the aid, or reinvoiced to the BENEFICIARY, that agrees to pay them.

ARTICLE V - RESUMPTION OF THE PROGRAM

In the event of failure or partial success, abandonment or non-exploitation of the results of the program being aided within 4 years of the date this contract is signed, and insofar as it has not repaid the entirety of the aid, the BENEFICIARY may not oppose the acquisition by Bpifrance Financement, or a third party designated by Bpifrance Financement, of all or part of the industrial property, results of any kind, models or prototypes made under of the program being aided and, in general, the BENEFICIARY cannot oppose the takeover of the program by other companies. The application of this clause will be made in a spirit of consultation in order to best preserve the interests of the BENEFICIARY and the general interest.

ARTICLE VI. DISBURSEMENT OF AID AND RESTITUTION OF MONEY PAID WITHOUT JUST CAUSE

VI.1. This aid will automatically give rise to the reimbursement of the aid in case of transfer - total or partial - as well as in case of termination of activity, dissolution or amicable liquidation of the BENEFICIARY.

In the event of solidarity among several BENEFICIARIES, the decision to initiate a legal procedure of court-ordered protection, reorganization or liquidation pronounced against one of the BENEFICIARIES will automatically involve the reimbursement of the aid by the other BENEFICIARIES. This will also hold true in the event of termination of business, dissolution or amicable liquidation of one of the BENEFICIARIES.

VI.2. At the sole initiative of Bpifrance Financement, this aid will result in the reimbursement of the aid for the entire amount in one of the following cases:

a. failure of the BENEFICIARY to comply with any of its obligations arising here from
b. failure by the BENEFICIARY to fulfill its social and tax obligations,
c. inaccurate or misleading statements by the BENEFICIARY,
d. incompletion or abandonment of the program noted by Bpifrance Financement

e. early termination, for whatever reason, of any contract granting the BENEFICIARY operating rights on techniques, products or processes implemented for the performance of the program being aided, and/or necessary for the marketing of the results deriving there from

VI.3. If the documents and support documents provided by the BENEFICIARY show expenditures lower than the expenditures included in the aid base, the amount of the aid will automatically be reduced in proportion to the total actual expenditure. justified and determined by Bpifrance Financement; the BENEFICIARY agrees to immediately pay back any money paid without just cause that is observed.

Recovery will be immediate in accordance with the law, if so required by Bpifrance Financement, with no court-ordered or other formalities; the amount to be paid will accordingly be equal to the outstanding amount of the assistance plus any late penalties, if applicable, at the rate laid down in Article VIII.

ARTICLE VII. INFORMATION OF THE WORKS COUNCIL

Where the aid granted in the form of a loan or repayable advance is more than € 1,500,000 or in the form of a subsidy of more than € 200,000, the BENEFICIARY agrees to inform and consult its Works Council in accordance with the provisions of Article R 2323-7-1 of the Labor Code.

The information and the consultation shall relate to the nature, object, amount and conditions of payment of the aid granted.

The BENEFICIARY will provide Bpifrance Financement with the following support documents: convocation of the Works Council, information provided to the Works Council and a report from the said Works Council.

The BENEFICIARY is informed that the recurrent or persistent failure to fulfill the above obligations is likely to lead Bpifrance Financement to demand partial or total reimbursement of the aid.

ARTICLE VIII. LATE PENALTIES

Any amount not paid within the contract terms will be increased by late payment penalties at the rate of 0.7% (zero point seven percent) per calendar month of delay.

ARTICLE IX-AUTHORIZATION TO TRANSMIT INFORMATION

The BENEFICIARY authorizes Bpifrance Financement to transmit to the other entities of the Bpifrance group, as well as to the State and the Local Authorities and in general to all donors, directly or indirectly involved in the financing of this request for assistance, information about the BENEFICIARY, the program being aided, and the amount of the aid granted. This information, along with information on the intensity of the aid and the sector of business activity concerned will also be provided to the European Commission, as part of the annual reports that must be provided. In general, Bpifrance Financement is authorized by the BENEFICIARY to convey to the European Commission all information necessary for the exercise of its control of State aid.

ARTICLE X - PROTECTION OF PERSONAL DATA

The information regarding names collected in the context of this document is mandatory for the processing and management of the transaction in question and in particular for its computer processing carried out under the responsibility of Bpifrance Financement. The information may also, by express agreement and in the absence of opposition, be used or communicated for the same purposes to other legal entities of the Group, its partners, intermediaries, brokers and insurers or even to third parties or subcontractors within the limit necessary for the performance of the services concerned. You may object, free of charge, to the data concerning you being used for prospecting purposes, including marketing purposes. In accordance with the provisions of Law no. 78-17 of January 6, 1978 and subsequent laws relating to data, files and freedoms, you have the right to access, rectify, delete and object to information about you; you can exercise this right by sending a letter to Bpifrance Financement, Information Systems Office, SIAQ Department, at 27/31 Avenue General Leclerc - 94710-Maisons-Alfort Cedex.

ARTICLE XI. PREVALENCE OF SPECIAL TERMS AND CONDITIONS

In the event of a conflict between these general and Special Terms and Conditions, the Special Terms and Conditions shall take precedence.

FORM TO BE INITIALED

Bpi

SUMMARY OF EXPENSES PAID AND STATEMENT OF GOOD STANDING WITH REGARD TO TAXES AND SOCIAL SECURITY

Beneficiary company:	0
Contract no.:	0
Date of receipt of the request for aid:	01/00/1900
Date of recording of expenses:	01/00/1900
Date of end of reimbursement deferment or date of end of program (cf. contract):	01/00/1900

Below is the summary by category of expenses paid, per the estimate attached to the aid contract

	Phase 1 from to	Phase 1 from to	Phase 2 from to	Total
Internal expenses:				
Costs of staff				
General one-time costs				
Purchases and consumables before tax				
SUB-TOTAL INTERNAL EXPENSES				
External services and subcontracts before tax				
SUB-TOTAL EXTERNAL SERVICES				
Investments, depreciations, etc. before tax:				
Non-recoverable investments				
Recoverable depreciation, investments				
Other specific costs (substantiated)				
SUB-TOTAL INVESTMENTS, ETC.				
GRAND TOTAL				

Amount of expenses provided in the estimate attached to the aid contract:

Amount of expenses paid by the beneficiary (in euros):

Company seal

☐ The undersigned certifies on his honor that the beneficiary of the aforementioned aid contract is in a regular situation with regard to his fiscal and social obligations.
☐ The undersigned certifies on his honor the accuracy of the information given in this statement of expenses.

Executed in:
Date:
Name and title of person signing this form who is authorized to contract:
Signature

Certification by the accounting expert or by the accountant designated by the public beneficiaries

☐ The undersigned certifies the accuracy of the information given in this statement of expenses.

Executed in:
Date:
Name and title of person signing this form who is authorized to contract:
Signature

This information is set down in a computer file intended for the internal use of OSEO. It has been declared to the National Commission of Information Technology and Freedoms (CNIL) in accordance with current law.

Note: This summary of the expenses paid as part of the innovation program conducted by the Beneficiary and supported by Bpifrance Financement, is derived from a computer file consisting of several tabs to complete, listing the different cost categories, according to the quote attached to the contract:

- Personnel costs tab (including fixed overhead costs)
- Purchases and Consumables tab
- External services and Subcontracting tab
- Tab for investments, depreciation, etc.

This computer tool will allow you to track the expenditures made under this innovation program and to establish the summary of expenses. **The electronic version of this computer tool will be sent to you upon request by e-mail to the contact person of the Innovation and Intangibles Management Service in charge of the management and follow-up of your aid file.**

Exhibit 10.49

ATTEROCOR, INC.

2012 STOCK PLAN

1. PURPOSES OF THE PLAN. The purposes of this Plan are to attract and retain the best available personnel for positions of substantial responsibility, to provide additional incentive to Employees, Directors and Consultants and to promote the success of the Company's business. Options granted under the Plan may be Incentive Stock Options or Nonstatutory Stock Options, as determined by the Administrator at the time of grant. Stock Purchase Rights may also be granted under the Plan.

2. DEFINITIONS. As used herein, the following definitions shall apply:

(a) ***"Administrator"*** means the Board or any of its Committees as shall be administering the Plan in accordance with Section 4 hereof.

(b) ***"Applicable Laws"*** means the requirements relating to the administration of stock option plans under U.S. state corporate laws, U.S. federal and state securities laws, the Code, any stock exchange or quotation system on which the Common Stock is listed or quoted and the applicable laws of any other country or jurisdiction where Options or Stock Purchase Rights are granted under the Plan.

(c) ***"Board"*** means the Board of Directors of the Company.

(d) ***"Change in Control"*** means the occurrence of any of the following events:

(i) any "person" (as such term is used in Sections 13(d) and 14(d) of the Exchange Act) becomes the "beneficial owner" (as defined in Rule 13d-3 of the Exchange Act), directly or indirectly, of securities of the Company representing 50% or more of the total voting power represented by the Company's then outstanding voting securities; or

(ii) the consummation of the sale or disposition by the Company of all or substantially all of the Company's assets; or

(iii) the consummation of a merger or consolidation of the Company with any other corporation, other than a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity or its parent) at least 50% of the total voting power represented by the voting securities of the Company or such surviving entity or its parent outstanding immediately after such merger or consolidation.

The Administrator may, in its sole discretion and without Service Provider consent, amend the definition of "Change in Control" to conform to the definition of "Change in Control" under Section 409A of the Code.

(e) ***"Code"*** means the Internal Revenue Code of 1986, as amended.

(f) ***"Committee"*** means a committee of Directors or of other individuals satisfying Applicable Laws appointed by the Board in accordance with Section 4 hereof.

(g) ***"Common Stock"*** means the Common Stock of the Company.

(h) ***"Company"*** means Atterocor, Inc., a Delaware corporation.

(i) ***"Consultant"*** means any person who is engaged by the Company or any Parent or Subsidiary to render consulting or advisory services to such entity.

(j) ***"Director"*** means a member of the Board.

(k) ***"Disability"*** means total and permanent disability as defined in Section 22(e)(3) of the Code.

(l) ***"Employee"*** means any person, including officers and Directors, employed by the Company or any Parent or Subsidiary of the Company. Neither service as a Director nor payment of a director's fee by the Company shall be sufficient to constitute "employment" by the Company.

(m) ***"Exchange Act"*** means the Securities Exchange Act of 1934, as amended.

(n) ***"Fair Market Value"*** means, as of any date, the value of Common Stock determined as follows:

(i) if the Common Stock is listed on any established stock exchange or a national market system, including without limitation the Nasdaq National Market or The Nasdaq SmallCap Market of The Nasdaq Stock Market, its Fair Market Value shall be the closing sales price for such Common Stock (or the closing bid, if no sales were reported) as quoted on such exchange or system on the day of determination, as reported in *The Wall Street Journal* or such other source as the Administrator deems reliable;

(ii) if the Common Stock is regularly quoted by a recognized securities dealer but selling prices are not reported, its Fair Market Value shall be the mean between the high bid and low asked prices for the Common Stock on the day of determination; or

(iii) in the absence of an established market for the Common Stock, the Fair Market Value thereof shall be determined in good faith by the Administrator.

(o) ***"Incentive Stock Option"*** means an Option intended to qualify as an incentive stock option within the meaning of Section 422 of the Code.

(p) ***"Nonstatutory Stock Option"*** means an Option not intended to qualify as an Incentive Stock Option.

(q) ***"Option"*** means a stock option granted pursuant to the Plan.

(r) **"*Option Agreement*"** means a written or electronic agreement between the

Company and an Optionee evidencing the terms and conditions of an individual Option grant. Each Option Agreement is subject to the terms and conditions of the Plan.

(s) ***"Optioned Stock"*** means the Common Stock subject to an Option or a Stock Purchase Right.

(t) ***"Optionee"*** means the holder of an outstanding Option or Stock Purchase Right granted under the Plan.

(u) ***"Parent"*** means a "parent corporation," whether now or hereafter existing, as defined in Section 424(e) of the Code.

(v) ***"Plan"*** means this 2012 Stock Plan.

(w) ***"Restricted Stock"*** means Shares issued pursuant to a Stock Purchase Right or Shares of restricted stock issued pursuant to an Option.

(x) ***"Restricted Stock Purchase Agreement"*** means a written agreement between the Company and Optionee evidencing the terms and restrictions applying to Shares purchased under a Stock Purchase Right. Each Restricted Stock Purchase Agreement is subject to the terms and conditions of the Plan and the notice of grant.

(y) ***"Securities Act"*** means the Securities Act of 1933, as amended.

(z) ***"Service Provider"*** means an Employee, Director or Consultant.

(aa) ***"Share"*** means a share of Common Stock, as adjusted in accordance with Section 13 below.

(bb) ***"Stock Purchase Right"*** means a right to purchase Common Stock pursuant to Section 11 below.

(cc) ***"Subsidiary"*** means a "subsidiary corporation," whether now or hereafter existing, as defined in Section 424(f) of the Code.

3. STOCK SUBJECT TO THE PLAN.

(a) Subject to the provisions of Section 13 of the Plan, the maximum aggregate number of Shares that may be subject to option and sold under the Plan is 3,320,118 Shares. In no event shall the number of Shares issued pursuant to Incentive Stock Options exceed 3,320,118 Shares. The Shares may be authorized but unissued, or reacquired Common Stock.

(b) If an Option or Stock Purchase Right expires or becomes unexercisable without having been exercised in full, the unpurchased Shares that were subject thereto shall become available for future grant or sale under the Plan (unless the Plan has terminated). However, Shares that have actually been issued under the Plan, upon exercise of either an Option or Stock Purchase Right, shall not be returned to the Plan and shall not become available for

future distribution under the Plan, except that if Shares of Restricted Stock are repurchased by the Company at their original purchase price, such Shares shall become available for future grant under the Plan.

4. ADMINISTRATION OF THE PLAN.

(a) Administrator. The Plan shall be administered by the Board or a Committee appointed by the Board, which Committee shall be constituted to comply with Applicable Laws.

(b) Powers of the Administrator. Subject to the provisions of the Plan and, in the case of a Committee, the specific duties delegated by the Board to such Committee, and subject to the approval of any relevant authorities, the Administrator shall have the authority in its discretion:

(i) to determine the Fair Market Value;

(ii) to select the Service Providers to whom Options and Stock Purchase Rights may from time to time be granted hereunder;

(iii) to determine the number of Shares to be covered by each such award granted hereunder;

(iv) to approve forms of agreement for use under the Plan;

(v) to determine the terms and conditions of any Option or Stock Purchase Right granted hereunder. Such terms and conditions include, but are not limited to, the exercise price, the time or times when Options or Stock Purchase Rights may be exercised (which may be based on performance criteria), any vesting acceleration or waiver of forfeiture restrictions, and any restriction or limitation regarding any Option or Stock Purchase Right or Common Stock relating thereto, based in each case on such factors as the Administrator, in its sole discretion, shall determine;

(vi) to prescribe, amend and rescind rules and regulations relating to the Plan, including rules and regulations relating to sub-plans established for the purpose of satisfying applicable foreign laws;

(vii) to allow Optionees to satisfy withholding tax obligations by electing to have the Company withhold from the Shares to be issued upon exercise of an Option or Stock Purchase Right that number of Shares having a Fair Market Value equal to the minimum amount required to be withheld. The Fair Market Value of the Shares to be withheld shall be determined on the date that the amount of tax to be withheld is to be determined. All elections by Optionees to have Shares withheld for this purpose shall be made in such form and under such conditions as the Administrator may deem necessary or advisable;

(viii) to amend the terms of any one or more Options or Stock Purchase Rights without the affected Service Provider's consent if necessary to maintain the qualified status of such Option as an Incentive Stock Option or to bring an Option or Stock Purchase Right

into compliance with Section 409A of the Code and the related guidance thereunder; and

(ix) to construe and interpret the terms of the Plan and Options granted pursuant to the Plan.

(c) Effect of Administrator's Decision. All decisions, determinations and interpretations of the Administrator shall be final and binding on all Optionees.

5. ELIGIBILITY. Nonstatutory Stock Options and Stock Purchase Rights may be granted to Service Providers. Incentive Stock Options may be granted only to Employees.

6. LIMITATIONS.

(a) Incentive Stock Option Limit. Each Option shall be designated in the Option Agreement as either an Incentive Stock Option or a Nonstatutory Stock Option. However, notwithstanding such designation, to the extent that the aggregate Fair Market Value of the Shares with respect to which Incentive Stock Options are exercisable for the first time by Optionee during any calendar year (under all plans of the Company and any Parent or Subsidiary) exceeds $100,000, such Options shall be treated as Nonstatutory Stock Options. For purposes of this Section 6(a), Incentive Stock Options shall be taken into account in the order in which they were granted. The Fair Market Value of the Shares shall be determined as of the time the Option with respect to such Shares is granted.

(b) At-Will Employment. Neither the Plan nor any Option or Stock Purchase Right shall confer upon any Optionee any right with respect to continuing Optionee's relationship as a Service Provider with the Company, nor shall it interfere in any way with his or her or its right or the Company's right to terminate such relationship at any time, with or without cause, and with or without notice.

7. TERM OF PLAN. Subject to stockholder approval in accordance with Section 19, the Plan shall become effective upon its adoption by the Board. Unless sooner terminated under Section 15, it shall continue in effect for a term of ten years from the later of (a) the effective date of the Plan, or (b) the earlier of the most recent board or stockholder approval of an increase in the number of Shares reserved for issuance under the Plan.

8. TERM OF OPTION. The term of each Option shall be stated in the Option Agreement; provided, however, that the term shall be no more than ten years from the date of grant thereof. In the case of an Incentive Stock Option granted to an Optionee who, at the time the Option is granted, owns stock representing more than 10% of the voting power of all classes of stock of the Company or any Parent or Subsidiary, the term of the Option shall be five years from the date of grant or such shorter term as may be provided in the Option Agreement.

9. OPTION EXERCISE PRICE AND CONSIDERATION.

(a) Exercise Price. The per share exercise price for the Shares to be issued upon exercise of an Option shall be such price as is determined by the Administrator, but shall be subject to the following:

(i) In the case of an Incentive Stock Option,

(A) granted to an Employee who, at the time of grant of such Option, owns stock representing more than 10% of the voting power of all classes of stock of the Company or any Parent or Subsidiary, the exercise price shall be no less than 110% of the Fair Market Value per Share on the date of grant.

(B) granted to any other Employee, the per Share exercise price shall be no less than 100% of the Fair Market Value per Share on the date of grant.

(ii) In the case of a Nonstatutory Stock Option,

(A) granted to a Service Provider who, at the time of grant of such Option, owns stock representing more than 10% of the voting power of all classes of stock of the Company or any Parent or Subsidiary, the exercise price shall be no less than 110% of the Fair Market Value per Share on the date of grant.

(B) granted to any other Service Provider, the per Share exercise price shall be no less than 85% of the Fair Market Value per Share on the date of grant.

(iii) Notwithstanding the foregoing, Options may be granted with a per Share exercise price other than as required above pursuant to a merger or other corporate transaction.

(b) Forms of Consideration. The consideration to be paid for the Shares to be issued upon exercise of an Option, including the method of payment, shall be determined by the Administrator (and, in the case of an Incentive Stock Option, shall be determined at the time of grant). Such consideration may consist of, without limitation, (i) cash; (ii) check; (iii) promissory note; (iv) other Shares, provided that such Shares (A) were acquired directly from the Company, (B) have been owned by Optionee for more than six months on the date of surrender and (C) have a Fair Market Value on the date of surrender equal to the aggregate exercise price of the Shares as to which such Option shall be exercised; (v) consideration received by the Company under a cashless exercise program implemented by the Company in connection with the Plan; or (vi) any combination of the foregoing methods of payment. In making its determination as to the type of consideration to accept, the Administrator shall consider whether acceptance of such consideration may be reasonably expected to benefit the Company.

10. EXERCISE OF OPTION.

(a) Procedure for Exercise; Rights as a Stockholder.

(i) Any Option granted hereunder shall be exercisable according to the terms hereof at such times and under such conditions as determined by the Administrator and set forth in the Option Agreement. An Option may not be exercised for a fraction of a Share. Except in the case of Options granted to officers, Directors and Consultants, Options shall become exercisable at a rate of no less than 20% per year over five years from the date the Options are granted.

(ii) An Option shall be deemed exercised when the Company receives (A) written or electronic notice of exercise (in accordance with the Option Agreement) from the person entitled to exercise the Option, and (B) full payment for the Shares with respect to which the Option is exercised. Full payment may consist of any consideration and method of payment authorized by the Administrator and permitted by the Option Agreement and the Plan. Shares issued upon exercise of an Option shall be issued in the name of Optionee or, if requested by Optionee, in the name of Optionee and his or her spouse. Until the Shares are issued (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company), no right to vote or receive dividends or any other rights as a stockholder shall exist with respect to the Shares, notwithstanding the exercise of the Option. The Company shall issue (or cause to be issued) such Shares promptly after the Option is exercised. No adjustment will be made for a dividend or other right for which the record date is prior to the date the Shares are issued, except as provided in Section 13 of the Plan.

(iii) Exercise of an Option in any manner shall result in a decrease in the number of Shares thereafter available, both for purposes of the Plan and for sale under the Option, by the number of Shares as to which the Option is exercised.

(b) Separation from Service. If Optionee ceases to be a Service Provider, Optionee may exercise his or her or its Option within 30 days of Optionee's separation from service, or such longer period of time as specified in the Option Agreement, to the extent that the Option is vested on the date of separation (but in no event later than the expiration of the term of the Option as set forth in the Option Agreement). If, on the date of separation, Optionee is not vested as to his or her or its entire Option, the Shares covered by the unvested portion of the Option shall revert to the Plan. If, after separation, Optionee does not exercise his or her or its Option within the time specified by the Administrator, the Option shall terminate, and the Shares covered by such Option shall revert to the Plan.

(c) Disability of Optionee. If Optionee ceases to be a Service Provider as a result of Optionee's Disability, Optionee may exercise his or her Option within six months of Optionee's separation from service, or such longer period of time as specified in the Option Agreement, to the extent the Option is vested on the date of separation (but in no event later than the expiration of the term of such Option as set forth in the Option Agreement). If, on the date of separation, Optionee is not vested as to his or her or its entire Option, the Shares covered by the unvested portion of the Option shall revert to the Plan. If, after separation, Optionee does not exercise his or her Option within the time specified herein, the Option shall terminate, and the Shares covered by such Option shall revert to the Plan.

(d) Death of Optionee. If Optionee dies while a Service Provider, the Option may be exercised within six months following Optionee's death, or such longer period of time as specified in the Option Agreement, to the extent that the Option is vested on the date of death (but in no event later than the expiration of the term of such Option as set forth in the Option Agreement) by Optionee's designated beneficiary, provided such beneficiary has been designated prior to Optionee's death in a form acceptable to the Administrator. If no such beneficiary has been designated by Optionee, then such Option may be exercised by the personal representative of Optionee's estate or by the person(s) to whom the Option is transferred pursuant to Optionee's will or in accordance with the laws of descent and distribution. If, at the

time of death, Optionee is not vested as to his or her entire Option, the Shares covered by the unvested portion of the Option shall immediately revert to the Plan. If the Option is not so exercised within the time specified herein, the Option shall terminate, and the Shares covered by such Option shall revert to the Plan.

(e) Leaves of Absence.

(i) Unless the Administrator provides otherwise, vesting of Options granted hereunder to officers and Directors shall be suspended during any unpaid leave of absence.

(ii) A Service Provider shall not cease to be an Employee in the case of (A) any leave of absence approved by the Company or (B) transfers between locations of the Company or between the Company, its Parent, any Subsidiary, or any successor.

(iii) For purposes of Incentive Stock Options, no such leave may exceed 90 days, unless reemployment upon expiration of such leave is guaranteed by statute or contract. If reemployment upon expiration of a leave of absence approved by the Company is not so guaranteed, then three months following the 91st day of such leave, any Incentive Stock Option held by Optionee shall cease to be treated as an Incentive Stock Option and shall be treated for tax purposes as a Nonstatutory Stock Option.

11. STOCK PURCHASE RIGHTS.

(a) Rights to Purchase. Stock Purchase Rights may be issued either alone, in addition to, or in tandem with other awards granted under the Plan and/or cash awards made outside of the Plan. After the Administrator determines that it will offer Stock Purchase Rights under the Plan, it shall advise the offeree in writing or electronically of the terms, conditions and restrictions related to the offer, including the number of Shares that such person shall be entitled to purchase, the price to be paid, and the time within which such person must accept such offer. The offer shall be accepted by execution of a Restricted Stock Purchase Agreement in the form determined by the Administrator.

(b) Repurchase Option. Unless the Administrator determines otherwise, the Restricted Stock Purchase Agreement shall grant the Company a repurchase option exercisable within 90 days of the voluntary or involuntary separation of the purchaser's service with the Company for any reason (including death or disability). The purchase price for Shares repurchased pursuant to the Restricted Stock Purchase Agreement shall be the original price paid by the purchaser and may be paid by cancellation of any indebtedness of the purchaser to the Company. The repurchase option shall lapse at such rate as the Administrator may determine.

(c) Other Provisions. The Restricted Stock Purchase Agreement shall contain such other terms, provisions and conditions not inconsistent with the Plan as may be determined by the Administrator in its sole discretion.

(d) Rights as a Stockholder. Once the Stock Purchase Right is exercised, the purchaser shall have rights equivalent to those of a stockholder and shall be a stockholder when his or her or its purchase is entered upon the records of the duly authorized transfer agent of the

Company. No adjustment shall be made for a dividend or other right for which the record date is prior to the date the Stock Purchase Right is exercised, except as provided in Section 13 of the Plan.

12. LIMITED TRANSFERABILITY OF OPTIONS AND STOCK PURCHASE RIGHTS. Unless determined otherwise by the Administrator, Options and Stock Purchase Rights may not be sold, pledged, assigned, hypothecated, transferred, or disposed of in any manner other than by will or the laws of descent and distribution, and may be exercised during the lifetime of Optionee, only by Optionee. If the Administrator in its sole discretion makes an Option or Stock Purchase Right transferable, such Option or Stock Purchase Right may only be transferred (a) by will, (b) by the laws of descent and distribution, or (c) to family members (within the meaning of Rule 701 of the Securities Act) through gifts or domestic relations orders, as permitted by Rule 701 of the Securities Act.

13. ADJUSTMENTS; DISSOLUTION OR LIQUIDATION; MERGER OR CHANGE IN CONTROL.

(a) Adjustments. In the event that any dividend or other distribution (whether in the form of cash, Shares, other securities, or other property), recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, repurchase, or exchange of Shares or other securities of the Company, or other change in the corporate structure of the Company affecting the Shares occurs, the Administrator, in order to prevent diminution or enlargement of the benefits or potential benefits intended to be made available under the Plan, may (in its sole discretion) adjust the number and class of Shares that may be delivered under the Plan and/or the number, class, and price of Shares covered by each outstanding Option or Stock Purchase Right.

(b) Dissolution or Liquidation. In the event of the proposed dissolution or liquidation of the Company, the Administrator shall notify each Optionee as soon as practicable prior to the effective date of such proposed transaction. To the extent it has not been previously exercised, an Option or Stock Purchase Right will terminate immediately prior to the consummation of such proposed action.

(c) Merger or Change in Control. In the event of a merger of the Company with or into another corporation, or a Change in Control, each outstanding Option and Stock Purchase Right shall be assumed or an equivalent option substituted by the successor corporation or a Parent or Subsidiary of the successor corporation. In the event that the successor corporation in a merger or Change in Control refuses to assume or substitute for the Option or Stock Purchase Right, then Optionee shall fully vest in and have the right to exercise the Option or Stock Purchase Right as to all of the Optioned Stock, including Shares as to which it would not otherwise be vested or exercisable. If an Option or Stock Purchase Right becomes fully vested and exercisable in lieu of assumption or substitution in the event of a merger or Change in Control, the Administrator shall notify Optionee in writing or electronically that this Option or Stock Purchase Right shall be fully exercisable for a period of 15 days from the date of such notice, and the Option or Stock Purchase Right shall terminate upon expiration of such period. For purposes of this paragraph, the Option or Stock Purchase Right shall be considered assumed if, following the merger or Change in Control, the option or right confers the right to purchase or

receive, for each Share of Optioned Stock subject to the Option or Stock Purchase Right immediately prior to the merger or Change in Control, the consideration (whether stock, cash, or other securities or property) received in the merger or Change in Control by holders of Common Stock for each Share held on the effective date of the transaction (and if holders were offered a choice of consideration, the type of consideration chosen by the holders of a majority of the outstanding Shares); provided, however, that if such consideration received in the merger or Change in Control is not solely common stock of the successor corporation or its Parent, the Administrator may, with the consent of the successor corporation, provide for the consideration to be received upon the exercise of the Option or Stock Purchase Right, for each Share of Optioned Stock subject to the Option or Stock Purchase Right, to be solely common stock of the successor corporation or its Parent equal in fair market value to the per share consideration received by holders of common stock in the merger or Change in Control.

14. TIME OF GRANTING OPTIONS AND STOCK PURCHASE RIGHTS. The date of grant of an Option or Stock Purchase Right shall, for all purposes, be the date on which the Administrator makes the determination granting such Option or Stock Purchase Right, or such later date as is determined by the Administrator. Notice of the determination shall be given to each Service Provider to whom an Option or Stock Purchase Right is so granted within a reasonable time after the date of such grant.

15. AMENDMENT AND TERMINATION OF THE PLAN.

(a) Amendment and Termination. The Board may at any time amend, alter, suspend or terminate the Plan.

(b) Stockholder Approval. The Board shall obtain stockholder approval of any Plan amendment to the extent necessary and desirable to comply with Applicable Laws.

(c) Effect of Amendment or Termination. No amendment, alteration, suspension or termination of the Plan shall impair the rights of any Optionee, unless mutually agreed otherwise between Optionee and the Administrator, which agreement must be in writing and signed by Optionee and the Company. Termination of the Plan shall not affect the Administrator's ability to exercise the powers granted to it hereunder with respect to Options granted under the Plan prior to the date of such termination.

(d) Section 409A of the Code. To the extent that the Board determines that any Option or Stock Purchase Right granted under the Plan is subject to Section 409A of the Code, the corresponding Option Agreement or Restricted Stock Purchase Agreement evidencing such Option or Stock Purchase Right shall incorporate the terms and conditions necessary to avoid the consequences described in Section 409A(a)(1) of the Code. To the extent applicable, the Plan and all Option Agreements and Restricted Stock Purchase Agreements shall be interpreted in accordance with Section 409A of the Code and U.S. Department of Treasury regulations and other interpretive guidance issued thereunder, including without limitation any such regulations or other guidance that may be issued or amended after the effective date of the Plan. Notwithstanding any provision of the Plan to the contrary, in the event that following the effective date of the Plan the Board determines that any Option or Stock Purchase Right may be subject to Section 409A of the Code and related U.S. Department of Treasury guidance

(including such U.S. Department of Treasury guidance as may be issued after the effective date of this Plan), the Board may adopt such amendments to the Plan and the applicable Option Agreements or Restricted Stock Purchase Agreements or adopt other policies and procedures (including amendments, policies and procedures with retroactive effect), or take any other actions, that the Board determines are necessary or appropriate to (i) exempt such Options and Stock Purchase Rights from Section 409A of the Code and/or preserve the intended tax treatment of the benefits provided with respect to each such Option and Stock Purchase Right, or (ii) comply with the requirements of Section 409A of the Code and related U.S. Department of Treasury guidance.

16. CONDITIONS UPON ISSUANCE OF SHARES.

(a) Legal Compliance. Shares shall not be issued pursuant to the exercise of an Option unless the exercise of such Option and the issuance and delivery of such Shares shall comply with Applicable Laws and shall be further subject to the approval of counsel for the Company with respect to such compliance.

(b) Investment Representations. As a condition to the exercise of an Option, the Administrator may require the person exercising such Option to represent and warrant at the time of any such exercise that the Shares are being purchased only for investment and without any present intention to sell or distribute such Shares if, in the opinion of counsel for the Company, such a representation is required.

17. INABILITY TO OBTAIN AUTHORITY. The inability of the Company to obtain authority from any regulatory body having jurisdiction, which authority is deemed by the Company's counsel to be necessary to the lawful issuance and sale of any Shares hereunder, shall relieve the Company of any liability in respect of the failure to issue or sell such Shares as to which such requisite authority shall not have been obtained.

18. RESERVATION OF SHARES. The Company, during the term of the Plan, shall at all times reserve and keep available such number of Shares as shall be sufficient to satisfy the requirements of the Plan.

19. STOCKHOLDER APPROVAL. The Plan shall be subject to approval by the stockholders of the Company within 12 months after the date the Plan is adopted. Such stockholder approval shall be obtained in the degree and manner required under Applicable Laws.

20. INFORMATION TO OPTIONEES. The Company shall provide to each Optionee and to each individual who acquires Shares pursuant to the Plan, not less frequently than annually during the period such Optionee has one or more Options or Stock Purchase Rights outstanding, and, in the case of an individual who acquires Shares pursuant to the Plan, during the period such individual owns such Shares, copies of annual financial statements. The Company shall not be required to provide such statements to key employees whose duties in connection with the Company assure their access to equivalent information.

Exhibit 10.50

July 28, 2015

Jeffery Brinza
7958 Branch Dr.
Brighton, MI 48116

Re: Employment Terms

Dear Jeff:

Atterocor, Inc. (the "***Company***") is pleased to offer you the position of Senior Vice President Administration and General Counsel on the following terms.

You will be responsible for leading the Company's corporate administration and legal initiatives. This includes, but is not limited to, providing senior management with effective advice on company strategies and their implementation, reviewing and negotiating contracts, and obtaining and overseeing the work of outside counsel. You will report to Julia C. Owens, CEO of the Company. Of course, the Company may change your position, duties, and work location from time to time in its discretion.

Your compensation will be $255,000, less payroll deductions and all required withholdings. You will be paid semi-monthly. Because your position is classified as exempt, you will not be eligible for overtime premiums. You will be eligible to receive an annual bonus (which shall be prorated for the fiscal year ending December 31, 2015) up to a maximum of 25% of your total compensation received during the most recently completed fiscal year, less payroll deductions and all required withholdings, with any such bonus to be determined at the sole discretion of the Company and its Board of Directors.

You will be eligible for standard Company benefits. At this time, the Company has established a benefits package for employees, that includes health insurance coverage, a 401(k) savings plan, flexible savings plan and paid vacation, and you will be eligible for other benefits as they become available. The Company may modify compensation and benefits from time to time in its discretion.

The Company intends to grant you, subject to approval by the Company's Board of Directors, a stock option to purchase 212,786 shares (the "***Option***") of Common Stock of the Company at fair market value as determined by the Board as of the date of grant, which the Board will determine following the receipt and adoption of an independent third party valuation of the Company's common stock. The Option will be subject to the terms and conditions of the Company's equity incentive plan and your grant agreement. Your grant agreement will include a four-year vesting schedule, under which 25 percent of your shares will vest after twelve months of employment, with the remaining shares vesting monthly thereafter, until either your Option is fully vested or your employment ends, whichever occurs first.

As a Company employee, you will be expected to abide by Company policies and procedures. As a condition of employment, you must sign and comply with the attached Employee

Proprietary Information and Inventions Agreement which prohibits unauthorized use or disclosure of Company proprietary information, among other obligations.

In your work for the Company, you will be expected not to use or disclose any confidential information, including trade secrets, of any former employer or other person to whom you have an obligation of confidentiality. Rather, you will be expected to use only that information which is generally known and used by persons with training and experience comparable to your own, which is common knowledge in the industry or otherwise legally in the public domain, or which is otherwise provided or developed by the Company. You agree that you will not bring onto Company premises any unpublished documents or property belonging to any former employer or other person to whom you have an obligation of confidentiality. You represent that you have disclosed to the Company any contract you have signed that may restrict your activities on behalf of the Company.

Your employment relationship with the Company is at-will. You may terminate your employment with the Company at any time and for any reason whatsoever simply by notifying the Company. Likewise, the Company may terminate your employment at any time, with or without cause or advance notice. Your employment at-will status can only be modified in a written agreement signed by you and by an officer of the Company. As we have discussed, in the event that we are not successful in our pending licensing of AZD4901 from AstraZeneca, the Company may not be in a position to continue your employment. I mention this so that you can assess whether or not you choose to give notice to your current employer in advance of the completion of our license.

This offer is contingent upon a background check clearance and satisfactory proof of your right to work in the United States. You agree to assist as needed and to complete any documentation at the Company's request to meet these conditions.

This letter, together with your Employee Proprietary Information and Inventions Agreement, forms the complete and exclusive statement of your employment agreement with the Company. It supersedes any other representations or promises made to you by anyone, whether oral or written. Changes in your employment terms, other than those changes expressly reserved to the Company's discretion in this letter, require a written modification signed by an officer of the Company.

Please sign and date this letter, and the enclosed Employee Proprietary Information and Inventions Agreement, and return them to me by August 1, 2015, if you wish to accept employment at the Company under the terms described above. If you accept our offer, we would like you to start on August 24, 2015.

We look forward to your favorable reply and to a productive and enjoyable work relationship.

Sincerely,

/s/ Julia C. Owens
Julia C. Owens, Chief Executive Officer

Accepted:

/s/ Jeffery Brinza
Jeffery Brinza

7-28-15
Date

Attachment: Employee Proprietary Information and Inventions Agreement

Exhibit 10.51

ASSIGNMENT AGREEMENT

ENTERED INTO on April 25, 2007

BETWEEN: **ALIZÉ PHARMA SAS,** a simplified joint stock company (*société par actions simplifiée*) constituted pursuant to the Laws of France, having its head office at 13, chemin de la Chonchance, 69 110 Ste-Foy-lès-Lyon, France, herein acting and represented by Thierry Abribat, its President, duly authorized, as he so declares;

(hereinafter referred to as "**Purchaser**")

AND: **ALIZÉ PHARMA INC.,** a corporation constituted pursuant to the *Canada Business Corporations Act*, having its head office at 56 Kelvin Avenue, Montreal, Province of Quebec, H2V 1T3, herein acting and represented by André De Villers, its Chairman, duly authorized, as he so declares;

(hereinafter referred to as "**Alizé**")

WHEREAS Alizé is the sole owner of all rights in and to the Intellectual Property and Patents described below; all such rights having been acquired pursuant to an Assignment Agreement entered into on May 12, 2006 (the "**Alizé Assignment Agreement**") between Alizé (formerly, 6551131 Canada Inc.), The Academic Hospital Rotterdam ("**Erasmus MC**"), Università Degli Studi di Torino ("**University of Torino**" and, together with Erasmus MC, the "**Institutions**"), Dr. Aart Johannes van der Lelij and Dr. Ezio Ghigo (the latter two individuals are collectively referred to as the "**Researchers**"); a copy of such agreememt is attached hereto as Appendix A;

WHEREAS Purchaser now wishes to acquire from Alizé, and Alizé now wishes to sell to Purchaser, all rights relating to the Intellectual Property, including the rights in and to the Patents;

NOW, THEREFORE, in consideration of the premises and the mutual covenants and agreements herein contained, and for other good and valuable consideration, the receipt and adequacy of which are acknowledged by each of the parties hereto, the parties hereby agree as follows:

ARTICLE 1
DEFINITIONS AND INTERPRETATION

1.1 Definitions. In this Agreement, unless the context clearly indicates to the contrary, the following words shall have the meanings set out hereunder:

1.1.1 "**Agreement**" means this Assignment Agreement, as may be amended from time to time in accordance with Section 8.2 hereof.

1.1.2 "**Improvements**" shall mean all future improvements, discoveries, inventions, developments, compositions of matter, processes, methods, technologies, results or products, patentable or not, conceived or obtained by the Institutions and/or the Researchers, alone or with others, regarding the Molecule in the Therapeutic Fields within the scope of the Patents and/or as a result of the Research Work. Improvements shall also include all tangible property related thereto including laboratory notebooks, reports, biological materials, drawings, data, records and computer software.

1.1.3 "**Intellectual Property**" shall mean the rights in the Molecule as well as in all past or present discoveries, inventions, developments, compositions of matter, processes, methods, technologies, improvements, results or products, patentable or not, conceived or obtained by the Institutions and/or the Researchers and/or Theratechnologies Inc., alone or with others, regarding the Molecule in the Therapeutic Fields within the scope of the Patents and/or as a result of the Research Work. Intellectual Property shall also include : (a) any and all "Improvements" assigned to Alizé pursuant to Section 4.1 of the Alizé Assignment Agreement, (b) any and all all tangible property related to the Intellectual Property including laboratory notebooks, reports, biological materials, drawings, data, records and computer software and (c) for greater certainty, any and all rights, titles and interests in and to any existing and future property of any nature whatsoever (tangible or intangible) acquired or to be acquired by Alizé under the Alizé Assignment Agreement.

1.1.4 "**Molecule**" shall mean non-acylated ghrelin or any substituted, truncated or modified analog thereof and claimed in the Patents.

1.1.5 "**parties**" means Alizé and Purchaser collectively.

1.1.6 "**Patents**" shall mean any and all patents and patent applications owned by Alizé pursuant to the Alizé Assignment Agreement, a list thereof is attached hereto as Appendix B.

1.1.7 "**Research Work**" shall mean the research work undertaken by the Institutions or the Researchers on the Molecule in the Therapeutic Fields pursuant to specific research agreements entered into from time to time with Alizé or the research work previously undertaken by Theratechnologies Inc. on the Molecule.

1.1.8 "**Therapeutic Fields**" shall mean all therapeutic applications of the Molecule, including, but not limited to, the fields of diabetes, glucose intolerance and obesity.

1.2 Interpretation. This Agreement shall be governed by the following provisions:

1.2.1 Should any provision of this Agreement be null or without effect or deemed unwritten under the laws of the Province of Quebec, it or they shall not render the other provisions, terms and conditions hereof invalid as this Agreement is not an indivisible whole.

1.2.2 The parties acknowledge that each provision of this Agreement was negotiated in good faith, understood and for good and valuable consideration, agreed to by them and that the agreement does not constitute an adhesion contract for it.

1.2.3 Time shall be of the essence of this Agreement and every part thereof.

1.2.4 The division of this Agreement into Articles, Sections, Subsections and other subdivisions and the insertions of headings are for convenience of reference only and shall not affect or be utilized in the construction or the interpretation hereof.

1.2.5 Where required herein, the singular shall comprise the plural and vice versa, the masculine shall include the feminine and vice versa while the neuter shall comprise both the masculine and the feminine.

1.2.6 This Agreement shall be governed and construed in accordance with the laws of the Province of Quebec and the laws of Canada applicable thereto. This Agreement shall be treated in all respects as a Quebec contract.

ARTICLE 2
ASSIGNMENT OF INTELLECTUAL PROPERTY

2.1 Alizé hereby irrevocably sells, assigns and transfers to Purchaser its entire rights, titles and interest in and to the Intellectual Property and the Patents. Alizé hereby waives all rights and interest with respect to the Intellectual Property and the Patents.

2.2 Purchaser covenants and agrees to prepare, deliver for execution and file, or cause to be prepared, delivered and filed, at its sole expense, patent assignments and other documents required in each patent office concerned for the assignment of the Patents to Purchaser.

2.3 Upon execution of this Agreement, Alizé covenants and agrees to transfer to Purchaser the tangible property in its possession related to the Intellectual Property including study results reports and raw data.

2.4 Alizé hereby represents and warrants to Purchaser as follows and acknowledges that Purchaser is relying upon such representations and warranties to enter into this Agreement and would not have entered into this Agreement if not for these representations and warranties:

2.4.1 To the best of its knowledge, Alizé is the owner of the entire rights, titles and interest in and to the Intellectual Property and the Patents.

2.4.2 Alizé has used its best efforts to take all steps reasonably necessary to preserve its legal rights in, and the secrecy of, the Intellectual Property and the Patents, except those for which disclosure has been required for legitimate reasons pursuant to confidentiality agreements or legal reasons.

2.4.3 To the best of Alizé's knowledge, no third party has any ownership right, title, interest, claiming, or lien on the Intellectual Property and the Patents. Alizé has not granted, and there are no outstanding options, licenses or agreements of any kind relating to the Intellectual Property and the Patents, nor is Alizé bound by, or a party to, any option, license or agreement with respect to the Intellectual Property and the Patents.

2.4.4 As applicable, Alizé has obtained from its consultants properly executed written assignments of intellectual property rights as well as waivers of moral rights therein, to the extent necessary to assign all of their rights, titles and interest in and to the Intellectual Property and the Patents to Alizé.

2.4.5 To the best of its knowledge, Alizé is not obligated under any agreement (including licenses, covenants or commitments of any nature) or subject to any judgment, decree or order of any court of administrative agency, or any other restriction that would interfere with its efforts to carry out its obligations hereunder or that would conflict with its obligations hereunder. To the best of Alizé's knowledge, the assignment of the Intellectual Property and the Patents will not conflict with, or result in, a breach of the terms, conditions or provisions of, or constitute a default under, any contract, covenant or instrument under which Alizé is now obligated. At no time during the conception or reduction to practice of the Intellectual Property was Alizé operating under any grants from any source, governmental or private, performing research sponsored by any source, governmental or private, or subject to any employment agreement or invention assignment or nondisclosure agreement or other obligation with any other person that could have a material effect upon Alizé's rights in and to the Intellectual Property and the Patents.

ARTICLE 3
CONSIDERATION

In consideration of the assignment of the Intellectual Property and Patents provided for herein, Purchaser hereby agrees to pay to Alizé, upon execution of this Agreement, an amount of CDN$ 80,000. Alizé acknowledges that this amount constitutes the entire consideration for the assignment of the Intellectual Property and the Patents and hereby confirms the sufficiency of the amount as the consideration for the assignment.

ARTICLE 4
ASSUMPTION AND UNDERTAKING OF PURCHASER

In accordance with article 6 of the Alizé Assignment Agreement, the Purchaser hereby agrees and undertakes to assume all of Alizé's obligations pursuant to the Alizé Assignment Agreement as if it was an original party thereto, including *inter alia* with respect to the payment of the royalties set forth therein.

ARTICLE 5
INTERVENTION OF THE RESEARCHERS AND INSTITUTIONS

5.1 Each of the Researchers and the Institutions has agreed to intervene to this Agreement in order to hereby:

5.1.1 acknowledge the assignment of Intellectual Property and Patents provided for in this Agreement;

5.1.2 confirm its undertaking to cooperate with Purchaser and Alizé, as may be reasonably required, in order to give effect to this Agreement;

5.1.3 accept and acknowledge that all any and rights of Alizé pursuant to the Alizé Assignment Agreement are hereby assigned to Purchaser, as if it was an original party to such agreement; Alizé being released of its obligations under the Alizé Assignment Agreement; and

5.1.4 agree to sell, assign and transfer irrevocably to Purchaser his/its entire rights, titles and interest in and to any and all Improvements and hereby waive all rights and interest with respect thereto.

5.2 The Institutions shall have the non-exclusive right to use the Intellectual Property for non-commercial research provided that such use (i) shall be limited to the Researchers and their respective team; and (ii) shall require the prior written consent of Purchaser.

ARTICLE 6
SALE OF THE PATENTS BY PURCHASER

In the event that Purchaser sells the Patents to a third party after the date hereof, Purchaser shall cause such third party purchaser to assume Purchaser's obligations pursuant to the Alizé Assignment Agreement as if it was an original party thereto, or, if Purchaser, the Institutions and Dr. Ezio Ghigo agree, remit an amount equal to 5% of the net proceeds resulting from such sale to the Institutions and Dr. Ezio Ghigo in the same proportions described in Section 4.4 of the Alizé Assignment Agreement. The parties acknowledge and agree that the sale of shares of Purchaser in whole or in part, its merger, a corporate reorganization of its affairs or any similar transaction does not constitute a sale of the Patents for the application of the present article.

ARTICLE 7
NOTICES

Any notice or other written communication required or permitted to be made or given hereunder may be made or given by either party by facsimile, by first-class mail (postage prepaid) or by air courier to the mailing address set out in the preamble of this Agreement or to such other respective addresses as either party shall designate to the other party, by like notice, provided that notice of a change of address shall be effective only upon receipt thereof. Notices or other written communications shall be deemed to have been sufficiently made or given: (i) if mailed, seven (7) days after being dispatched by mail, postage prepaid; (ii) if by air courier, three (3) days after delivery to the air courier company; or (iii) if by facsimile with confirmed transmission, so long as original followed via mail or air courier, within one (1) day of transmission.

ARTICLE 8
FINAL PROVISIONS

8.1 This Agreement shall be binding upon and inure to the benefit of the parties, the Researchers, the Institutions and their respective successors and permitted assigns.

8.2 This Agreement constitutes the entire agreement of the parties with respect to the subject matter of this Agreement and supersedes all prior and contemporaneous agreements and understandings in connection therewith. It may not be changed nor modified orally, but only by agreement in writing signed by a duly authorized representative of each of the parties.

8.3 Each of the parties upon the request of the other shall do, execute, acknowledge and deliver or cause to be done, executed, acknowledged or delivered all such further acts, deeds, documents, assignments, transfers, conveyances, powers of attorney and assurances as may be reasonably necessary or desirable to effect complete consummation of the transactions contemplated by this Agreement such as documents required in each patent office concerned.

8.4 Neither failure nor delay by either party to exercise any right or remedy provided in this Agreement or by statute, or law shall operate as a waiver of such right or remedy, nor shall any single or partial exercise of any such right or remedy preclude any other or further exercise of any other right or remedy. The rights and remedies set forth in this Agreement are cumulative and enforcement of one right or remedy shall not preclude subsequent enforcement of the same or other rights and remedies provided in this Agreement or at law.

8.5 This Agreement and all rights and obligations hereunder shall not be assigned in whole or in part by Alizé without the prior written consent of Purchaser.

8.6 The parties hereto have required that the present Agreement and all deeds, documents, or notices relating thereto be drafted in the English language; *les parties aux présentes ont exigées que la présente convention et tout autre contrat, document ou avis afférent ou subordonné aux présentes soient rédigés en langue anglaise.*

8.7 This Agreement may be executed in multiple counterparts, and by the different parties in separate counterparts, each of which when executed shall be deemed to be an original but all of which taken together shall constitute one and the same agreement. This Agreement may be signed by telecopier and any such signature shall be valid and binding.

[The signatures appear on next page.]

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed in counterparts as of the day and year first set forth above.

ALIZÉ PHARMA SAS

Per: /s/ Thierry Abribat
Thierry Abribat, President

ALIZÉ PHARMA INC.

Per: /s/ André De Villers
André De Villers, Chairman

INTERVENTION

Each of the undersigned hereby accepts the provisions of Article 5 of this Agreement and accpets to be bound by them.

THE ACADEMIC HOSPITAL ROTTERDAM

Per: /s/ F.G.A. van der Meché
Name: Prof. dr. F.G.A. van der Meché
Title: Executive Board

Name:
Title:

DIPARTIMENTO DI MEDICINA INTERNA
UNIVERSITA' DI TORINO
Il Direttore
Prof. Ezio Ghigo

UNIVERSITÀ DEGLI STUDI DI TORINO

Per: /s/ Ezio GHIGO
Name: Prof. Ezio GHIGO
Title: Chairman, Department of Internal Medicine University of Turin, ITALY

Name:
Title:

/s/ Dr. Aart. Johannes van der Lelij
DR. AART JOHANNES VAN DER LELIJ

/s/ Dr. Ezio Ghigo
DR. EZIO GHIGO

APPENDIX A

Alizé Assignment Agreement

(see copy attached hereto)

ASSIGNMENT AGREEMENT

ENTERED INTO on May 12, 2006

BETWEEN:	**6551131 CANADA INC.**, a corporation constituted pursuant to the *Canada Business Corporations Act*, having its head office at 56 Kelvin Avenue, Montreal, Province of Quebec, H2V 1T3, herein acting and represented by Thierry Abribat, its Director, duly authorized, as he so declares
	(hereinafter referred to as "**Newco**")
AND:	**THE ACADEMIC HOSPITAL ROTTERDAM**, acting under the name Erasmus MC, an institution organized in accordance with public law of the Netherlands, and hereby acting for and on behalf of its Department of Internal Medicine, its mailing address being Erasmus MC, P.O. Box 2040, 3000 CA, in the City of Rotterdam, Netherlands, herein acting and represented by Prof.dr. F.G.A. van der Meché, member of the Board of Executives, duly authorized, as he so declares
	(hereinafter referred to as "**Erasmus MC**")
AND:	**UNIVERSITÀ DEGLI STUDI DI TORINO**, a university situated at Via Po 17, in the City of Torino, Italy 10100, herein acting and represented by Dr. Ezio Ghigo, its Chairman of the Department of Internal Medicine, duly authorized, as he so declares
	(hereinafter referred to as the "**University of Torino**")
	(Erasmus MC and the University of Torino hereinafter collectively referred to as the "**Institutions**")
AND:	**DR. AART JOHANNES VAN DER LELIJ**, practicing at Erasmus MC, P.O. Box 2040, 3000 CA, in the City of Rotterdam, Netherlands
	(hereinafter referred to as "**Dr. van der Lelij**")
AND:	**DR. EZIO GHIGO**, residing at D'Azeglio 22, 10125 Torino, Italy

(hereinafter referred to as "**Dr. Ghigo**")

(Dr. van der Lelij and Dr. Ghigo hereinafter collectively referred to as the "**Researchers**")

WHEREAS the Researchers have made discoveries in the field of therapeutic applications of non-acylated ghrelin, including, but not limited to, diabetes, glucose intolerance and obesity;

WHEREAS Newco wishes to acquire all such rights including the rights in and to the Patents (as defined hereinafter);

WHEREAS Erasmus MC is the sole owner of all such rights pursuant to the Termination and Assignment Agreement entered into on April 11, 2006 with Theratechnologies Inc., University of Torino and the Researchers;

NOW, THEREFORE, in consideration of the premises and the mutual covenants and agreements herein contained, and for other good and valuable consideration, the receipt and adequacy of which are acknowledged by each of the parties hereto, the parties hereby agree as follows:

ARTICLE 1
DEFINITIONS AND INTERPRETATION

1.1 Definitions. In this Agreement, unless the context clearly indicates to the contrary, the following words shall have the meanings set out hereunder:

1.1.1 "**First Patent**" shall mean Canadian patent application no. 2,365,704, filed December 18, 2001; International patent application serial no. PCT/CA02/01964, filed December 18, 2002, entitled "Pharmaceutical Compositions Comprising Unacylated Ghrelin and Therapeutical Uses Thereof", a copy of which is provided as Appendix A; and any and all patents and patent applications which claim priority therefrom, are based thereon, or have been otherwise filed by or on behalf of Theratechnologies Inc. and describe the same or substantially the same invention as described therein.

1.1.2 "**Improvements**" shall mean all future improvements, discoveries, inventions, developments, compositions of matter, processes, methods, technologies, results or products, patentable or not, conceived or obtained by the Institutions and/or the Researchers, alone or with others, regarding the Molecule in the Therapeutic Fields within the scope of the Patents and/or as a result of the Research Work. Improvements shall also include all tangible property related thereto including laboratory notebooks, reports, biological materials, drawings, data, records and computer software.

1.1.3 "**Intellectual Property**" shall mean the rights in the Molecule as well as in all past or present discoveries, inventions, developments, compositions of matter, processes, methods, technologies, improvements, results or products, patentable or not, conceived or obtained by the Institutions and/or the Researchers and/or Theratechnologies Inc., atone or with others, regarding the Molecule in the Therapeutic Fields within the scope of the Patents and/or as a result of the Research Work. Intellectual Property shall also, include all tangible property related thereto including laboratory notebooks, reports, biological materials, drawings, data, records and computer software.

1.1.4 "**Molecule**" shall mean non-acylated ghrelin or any substituted, truncated or modified analog thereof and claimed in the First Patent and Second Patent.

1.1.5 "**Patents**" shall mean the First Patent and the Second Patent.

1.1.6 "**Product**" shall mean any product derived from the Intellectual Property.

1.1.7 "**Research Work**" shall mean the research work undertaken by the Institutions or the Researchers on the Molecule in the Therapeutic Fields pursuant to specific research agreements entered into from time to time with Newco or the research work previously undertaken by Theratechnologies Inc. on the Molecule.

1.1.8 "**Second Patent**" shall mean United States provisional patent application no. 60/513,540, filed October 24, 2003; International patent application serial no. PCT/CA2004/001858, filed October 22, 2004, entitled "Use of Ghrelin and Unacylated Ghrelin Compositions in Insulin-Related Disease Conditions", a copy of which is provided as Appendix B; and any and all patents and patent applications which claim priority therefrom, are based thereon, or are otherwise filed by or on behalf of Theratechnologies Inc. and describe the same or substantially the same invention as described therein.

1.1.9 "**Therapeutic Fields**" shall mean all therapeutic applications of the Molecule, including, but not limited to, the fields of diabetes, glucose intolerance and obesity.

1.2 Interpretation. This Agreement shall be governed by the following provisions:

1.2.1 Should any provision of this Agreement be null or without effect or deemed unwritten under the laws of the Province of Quebec, it or they shall not render the other provisions, terms and conditions hereof invalid as this Agreement is not an indivisible whole.

1.2.2 The parties acknowledge that each provision of this Agreement was negotiated in good faith, understood and for good and valuable consideration, agreed to by them and that the agreement does not constitute an adhesion contract for it.

1.2.3 Time shall be of the essence of this Agreement and every part thereof.

1.2.4 The division of this Agreement into Articles, Sections, Subsections and other subdivisions and the insertions of headings are for convenience of reference only and shall not affect or be utilized in the construction or the interpretation hereof.

1.2.5 Where required herein, the singular shall comprise the plural and vice versa, the masculine shall include the feminine and vice versa while the neuter shall comprise both the masculine and the feminine.

1.2.6 This Agreement shall be governed and construed in accordance with the laws of the Province of Quebec and the laws of Canada applicable thereto. This Agreement shall be treated in all respects as a Quebec contract.

ARTICLE 2
ASSIGNMENT OF INTELLECTUAL PROPERTY

2.1 Erasmus MC hereby irrevocably sells, assigns and transfers to Newco its entire rights, titles and interest in and to the Intellectual Property and the Patents. Erasmus MC hereby waives all rights and interest with respect to the Intellectual Property and the Patents.

Each of the Researchers and the University of Torino hereby acknowledges the above-described assignment in favour of Newco and covenants and agrees to cooperate with Newco and Erasmus MC in order to implement such assignment of the Intellectual Property and the Patents in favour of Newco.

Notwithstanding the above-described assignment in favour of Newco, the Institutions shall have the non-exclusive right to use the Intellectual Property for non-commercial research provided that such use (i) shall be limited to the Researchers and their respective team; and (ii) shall require the prior written consent of Newco.

2.2 Newco covenants and agrees to prepare, deliver for execution and file, or cause to be prepared, delivered and filed, at its sole expense, patent assignments and other documents required in each patent office concerned for the assignment of the Patents to Newco.

2.3 Upon execution of this Agreement and within four (4) weeks thereof, each of the Researchers, the University of Torino and Erasmus MC covenants and agrees to transfer to Newco the tangible property in his/its possession related to the Intellectual Property including study results reports and raw data.

2.4 Erasmus MC hereby represents and warrants to Newco as follows and acknowledges that Newco is relying upon such representations and warranties to enter into this Agreement and would not have entered into this Agreement if not for these representations and warranties:

2.4.1 To the best of its knowledge, Erasmus MC is the owner of the entire rights, titles and interest in and to the Intellectual Property and the Patents.

2.4.2 Erasmus MC has used its best efforts to take all steps reasonably necessary to preserve its legal rights in, and the secrecy of, the Intellectual Property and the Patents, except those for which disclosure has been required for legitimate reasons pursuant to confidentiality agreements or legal reasons.

2.4.3 To the best of its knowledge, its rights in the Intellectual Property and the Patents do not conflict with or infringe upon the rights of others. Erasmus MC, to the best of its knowledge, does not currently utilize any invention of any other party related to the Molecule. Erasmus MC, to the best of its knowledge, has not in the past violated or infringed, and is not currently violating or infringing, any intellectual property rights of any other person, in relation to the Molecule. Erasmus MC has not received any communications or been made a party to any suit or any other proceeding alleging that it (or any of its employees or consultants) has violated or infringed or will violate or infringe, any intellectual property rights of any other person in relation to the Molecule.

2.4.4 To the best of Erasmus MC's knowledge, no third party has any ownership right, title, interest, claiming, or lien on the Intellectual Property and the Patents, Erasmus MC has not granted, and there are no outstanding options, licenses or agreements of any kind relating to the Intellectual Property and the Patents, nor is Erasmus MC bound by, or a party to, any option, license or agreement with respect to the Intellectual Property and the Patents.

2.4.5 Erasmus MC has obtained from its consultants properly executed written assignments of intellectual property rights as well as waivers of moral rights therein, to the extent necessary to assign all of their rights, titles and interest in and to the Intellectual Property and the Patents to Erasmus MC.

2.4.6 To the best of its knowledge, Erasmus MC is not obligated under any agreement (including licenses, covenants or commitments of any nature) or subject to any judgment, decree or order of any court of administrative agency, or any other restriction that would interfere with its efforts to carry out its obligations hereunder or that would conflict with its obligations hereunder. To the best of Erasmus MC's knowledge, the assignment of the Intellectual Property and the Patents will not conflict with, or result in, a breach of the terms, conditions or provisions of, or constitute a default under, any contract, covenant or instrument under which Erasmus MC is now obligated. At no time during the conception or reduction to practice of the Intellectual Property was Erasmus MC operating under any grants from any source, governmental or private, performing research sponsored by any source, governmental or private, or subject to any employment agreement or invention assignment or nondisclosure agreement or other obligation

with any other person that could have a material effect upon Erasmus MC's rights in and to the Intellectual Property and the Patents.

ARTICLE 3
CONSIDERATION

3.1 In consideration of the assignment of the Intellectual Property and Patents provided for herein, Newco hereby agrees to pay to Erasmus MC, upon execution of this Agreement, an amount of CDN$ 80,000. Erasmus MC acknowledges that this amount constitutes the entire consideration for the assignment of the Intellectual Property and the Patents and hereby confirms the sufficiency of the amount as the consideration for the assignment.

3.2 Newco covenants and agrees to reimburse to Erasmus MC the expenses incurred with Smart & Biggar related to the Patents and incurred since the acquisition of the Patents from Theratechnologies Inc. until the assignment of the latter to Newco pursuant to the present Agreement, the whole upon presentation of supporting invoices.

ARTICLE 4
ROYALTIES

4.1 The Institutions and Dr. Ghigo agree to cooperate with Newco as Newco may require to develop and/or commercialize the Intellectual Property. The Institutions and Dr. Ghigo also hereby sell, assign and transfer irrevocably to Newco their entire rights, titles and interest in and to any and all Improvements and hereby waive all rights and interest with respect thereto.

4.2 In consideration of said cooperation and assignment of the Improvements identified in section 4.1, Newco hereby covenants and agrees to pay to the Institutions and to Dr. Ghigo an annual 1,5 % royalty fee calculated on the Net Sales of Newco. For the purposes hereof, "**Net Sales**" shall be defined as yearly sales made by Newco for the Products less the total of the following amounts related thereto: (i) applicable taxes and duties; (ii) all rebates or quantity discounts to distributors applicable after sale, bad debts; (iii) sales commissions; (iv) freight and transportation costs and (v) insurance costs.

4.3 In further consideration of the cooperation and assignment of the Improvements identified in section 4.1, the Institutions and Dr. Ghigo will also be entitled to receive an annual 5 % royalty fee calculated on the following revenues of Newco directly generated from the Patents, the Intellectual Property and the Improvements : (i) royalty payments on sale of Products paid by Newco's licensees; and (ii) upfront or regulatory milestone payments paid by Newco's licensees pursuant to license agreements.

4.4 The royalty payments described in sections 4.2 and 4.3 above shall be payable by Newco to the Institutions and Dr. Ghigo in the following proportions :

50 % to Erasmus MC

30 % to University of Torino
20 % to Dr. Ghigo

4.5 The royalty payments shall (i) accrue and be computed in the currency of the country in which sales or payments shall have been made; and (ii) be payable no later than 180 days Following the last day of each financial year end of Newco namely, December 31.

4.6 Notwithstanding the generality of the above sections, the royalty payments :

4.6.1 shall only be payable commencing from the earliest grant or issue date of the Patents, and until the latest date the granted or issued Patents expire, are withdrawn, become abandoned, or are declared invalid or otherwise unenforceable by a Court or administrative body of competent jurisdiction;

4.6.2 will be pro-rated amongst all the Patents filed prior to sixty (60) days of the date of this Assignment, such that the magnitude of the royalties payable in each year will diminish over time based on the total number of Patents existing in each year. For the purpose of this calculation, a Patent shall not be considered an existing Patent if, prior to the end of any given year, it has expired, been withdrawn, become abandoned, or been declared invalid or otherwise unenforceable by a Court or administrative body of competent jurisdiction. For greater certainty, an international patent application shall not be considered an existing Patent for the purpose of this calculation.

4.7 Newco agrees that the Institutions and Dr. Ghigo, jointly and not individually, will have the right to audit books and records pertaining to the royalty payments on Net Sales. Any such verification may be performed from time to time, at a reasonable frequency, and following a reasonable prior written notice to Newco, by a reputable and independent accounting firm, according to a procedure that will be negociated in good faith and agreed between the parties at the latest when the first marketing authorization will be filed, either at the FDA or the EMEA, for the first Product.

4.8 In further consideration of the cooperation and assignment of the Improvements identified in section 4.1, Newco hereby covenants and agrees to pay to the Institutions and to Dr. Ghigo, in the same proportions described in Section 4.4, a milestone payment in the amount of CND$ 100,000 upon the first regulatory approval granted to Newco by either EMEA or FDA, it being understood that such amount of CND$ 100,000 shall be deducted from any further royalty payments payable by Newco to the Institutions and Dr. Ghigo pursuant to Sections 4.2 or 4.3 hereof.

ARTICLE 5
MARKETING

5.1 From June 1, 2007, Newco covenants and agrees, directly and indirectly through a licensee, to use reasonnable efforts to develop, introduce for sale and promote the Products. The Institutions and Dr. Ghigo agree that Newco is using reasonnable efforts when :

5.1.1 Newco spends annually an amount of at least CDN$ 100,000 in research and development related to the Products; or

5.1.2 Newco actively pursues the registrations, licences and permits necessary to market the Products; or

5.1.3 There is actual commercialisation of a Product.

5.2 If Newco does not respect its obligation to use such reasonnable efforts within 180 days after having received from the Institutions and Dr. Ghigo, a prior written notice, the Institutions and Dr. Ghigo shall have the right to jointly terminate this Agreement and acquire the rights in and to the Patents at a price equal to all the out-of-pocket expenses related to the Patents, including, but not limited to, the purchase price disbursed by Newco to Erasmus MC to purchase the Patents, namely CDN $80,000.

ARTICLE 6
SALE OF THE PATENTS BY NEWCO

6.1 In the event that Newco sells the Patents to a third party, Newco shall cause such third party purchaser to assume Newco's obligations pursuant to this Agreement as if it was an original party thereto, or, if Newco, the Institutions and Dr. Ghigo agree, remit an amount equal to 5% of the net proceeds resulting from such sale to the Institutions and Dr. Ghigo in the same proportions described in Section 4.4. The parties acknowledge and agree that the sale of shares of Newco in whole or in part, its merger, a corporate reorganization of its affairs or any similar transaction does not constitute a sale of the Patents for the application of the present article.

ARTICLE 7
NOTICES

Any notice or other written communication required or permitted to be made or given hereunder may be made or given by either party by facsimile, by first-class mail (postage prepaid) or by air courier to the mailing address set out in the preamble of this Agreement or to such other respective addresses as either party shall designate to the other party, by like notice, provided that notice of a change of address shall be effective only upon receipt thereof. Notices or other written communications shall be deemed to have been sufficiently made or given: (i) if mailed, seven (7)

days after being dispatched by mail, postage prepaid; (ii) if by air courier, three (3) days after delivery to the air courier company; or (iii) if by facsimile with confirmed transmission, so long as original followed via mail or air courier, within one (1) day of transmission.

ARTICLE 8
FINAL PROVISIONS

8.1 This Agreement shall be binding upon and inure to the benefit of the parties hereto, their successors and permitted assigns.

8.2 This Agreement constitutes the entire agreement of the parties with respect to the subject matter of this Agreement and supersedes all prior and contemporaneous agreements and understandings in connection therewith. It may not be changed nor modified orally, but only by agreement in writing signed by a duly authorized representative of each of the parties hereto.

8.3 Each of the parties upon the request of the other shall do, execute, acknowledge and deliver or cause to be done, executed, acknowledged or delivered all such further acts, deeds, documents, assignments, transfers, conveyances, powers of attorney and assurances as may be reasonably necessary or desirable to effect complete consummation of the transactions contemplated by this Agreement such as documents required in each patent office concerned.

8.4 Neither failure nor delay by either party to exercise any right or remedy provided in this Agreement or by statute, or law shall operate as a waiver of such right or remedy, nor shall any single or partial exercise of any such right or remedy preclude any other or further exercise of any other right or remedy. The rights and remedies set forth in this Agreement are cumulative and enforcement of one right or remedy shall not preclude subsequent enforcement of the same or other rights and remedies provided in this Agreement or at law.

8.5 This Agreement and all rights and obligations hereunder shall not be assigned in whole or in part by either Erasmus MC, University of Torino, Dr. van der Lelij or Dr. Ghigo to any third party without the prior written consent of Newco.

8.6 The parties hereto have required that the present Agreement and all deeds, documents, or notices relating thereto be drafted in the English language; les parties aux présentes ont exigées que la présents convention et tout autre contrat, document ou avis afférent ou subordonné aux présentes soient rédigés en langue anglaise.

8.7 This Agreement may be executed in multiple counterparts, and by the different parties in separate counterparts, each of which when executed shall be deemed to be an original but all of which taken together shall constitute one and the same agreement. This Agreement may be signed by telecopier and any such signature shall be valid and binding.

[The signatures appear on next page.]

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed in counterparts as of the day and year first set forth above.

6551131 CANADA INC.

Per: /s/ Thierry Abribat
Thierry Abribat

THE ACADEMIC HOSPITAL ROTTERDAM

Per: /s/ F.G.A. van der Meché

Name: Prof.dr. F.G.A. van der Meché

Title: Member of the Board of Executives

DIPARTIMENTO DI MEDICINA INTERNA
UNIVERSITA' DI TORINO
Il Direttore
Prof. Ezio Ghigo

UNIVERSITÀ DEGLI STUDI DI TORINO

Per: /s/ Ezio GHIGO

Name: Prof. Ezio GHIGO

Title: Chairman, Department of Internal Medicine University of Turin

/s/ Dr. A.J. Van der Lelij
DR. A.J. VAN DER LELIJ

DIPARTIMENTO DI MEDICINA INTERNA
UNIVERSITA' DI TORINO
Il Direttore
Prof. Ezio Ghigo

/s/ Dr. Ezio Ghigo
DR. EZIO GHIGO

APPENDIX B

Patents

(see list attached hereto)

Patent applications based on PCT/CA2004/001858 filed October 22, 2004

Use of ghrelin and unacylated ghrelin composition in insulin related disease conditions

Your Ref.	Our Ref.	Country	App. No.	Date of filing	Owner of record	Next M/fee due	Examination request due	Status
N/A	86937-5	CA	2543507	National Phase entered on Apr. 24, 2006	Theratechnologies Inc. (**1**)	Oct. 22, 2007	Oct. 22, 2009	—
N/A	86937-6	EP	4789766	National Phase entered on May 23, 2006	The Academic Hospital Rotterdam, acting under the name Erasmus MC	Oct. 31, 2007	—	Awaiting first Examiner's Report or Notice of Allowance
N/A	86937-7	US	not yet known	National Phase entered on Apr. 21, 2006	Theratechnologies Inc. (**2**)	—	—	Awaiting first Examiner's Report or Notice of Allowance

(**1**) Awaiting recordal of assignment filed to "The Academic Hospital Rotterdam, acting under the name Erasmus MC".
(**2**) Awaiting recordal of assignment filed to "Alizé Pharma Inc."

Patent applications based on PCT/CA2002/001964 filed December 18, 2002

Pharmaceutical compositions comprising unacylated ghrelin and therapeutical uses thereof

Your Ref.	Our Ref.	Country	App. No.	Date of filing	Owner of record	Next M/fee due	Examination request due	Status
THB-C1.1/CA/PCT	86937-1	CA	2470235	National Phase entered on June 14, 2004	The Academic Hospital Rotterdam, acting under the name Erasmus MC	Dec. 18, 2007	Dec. 18, 2007	—
THB-C1.1/JP/PCT	86937-2	JP	2003-552322	National Phase entered on June 18 2004	The Academic Hospital Rotterdam, acting under the name Erasmus MC	—	—	Awaiting first Examiner's Report or Notice of Allowance

THB-C1.1/EP/PCT	86937-3	EP	2787266.2	National Phase entered on June 30, 2004	Erasmus MC	Dec. 31, 2007	—	Awaiting second Examiner's Report or Notice of Allowance
THB-C1.1/US/PCT	86937-4	US	10/499376	National Phase entered on June 15, 2004 and accepted on Nov. 29, 2004	The Academic Hospital Rotterdam	—	—	First Examiner's Report issued Mar. 29, 2007: due Apr. 29, 2007 extendible to Sept. 29, 2007

Exhibit 10.52

ATTEROCOR, INC.

JULIA C. OWENS EMPLOYMENT AGREEMENT

This Employment Agreement (the "**Agreement**") is entered into as of July 25, 2012 (the "**Effective Date**") by and between Atterocor, Inc. (the "**Company**"), and Julia C. Owens ("**Executive**").

RECITALS

WHEREAS, Executive has been engaged by the Company as a consultant to serve as the Company's acting Chief Executive Officer pursuant to that certain Consulting Agreement dated January 23, 2012 (the "**Consulting Agreement**");

WHEREAS, pursuant to that certain Restricted Stock Purchase Agreement dated January 23, 2012, and as amended July 25, 2012 (the "**RSPA**"), the Company issued to Executive 700,000 shares of common stock of the Company ("**Common Stock**"); and

WHEREAS, the Company and Executive desire to terminate the Consulting Agreement as of the date hereof and enter into this new employment agreement to memorialize the terms and conditions of Executive's arrangement with the Company as an employee serving as the Company's Chief Executive Officer.

NOW, **THEREFORE**, in consideration of the mutual promises made herein, the Company and Executive hereby agree as follows:

1. Duties and Scope of Employment.

(a) Positions and Duties. As of July 25, 2012 (the "**Start Date**"), Executive, as a Company employee, will serve as the Company's Chief Executive Officer. Executive will render such business and professional services in the performance of her duties, consistent with Executive's position within the Company, as will reasonably be assigned to her by the Company's Board of Directors (the "**Board**"). The period of Executive's employment under this Agreement is referred to herein as the "**Employment Term**."

(b) Board Membership. Executive will serve as a director of the Board, in the capacity of common holder representative, subject to any required Board and/or stockholder approval.

(c) Obligations. During the Employment Term, Executive will perform her duties faithfully and to the best of her ability and will devote her full business efforts and time to the Company. For the duration of the Employment Term, Executive agrees not to actively engage in any other employment, occupation or consulting activity for any direct or indirect remuneration without the prior approval of the Board.

2. At-Will Employment. The parties agree that Executive's employment with the Company will be "at-will" employment and may be terminated at any time with or without cause or

notice. Executive understands and agrees that neither her job performance nor promotions, commendations, bonuses or the like from the Company give rise to or in any way serve as the basis for modification, amendment, or extension, by implication or otherwise, of her employment with the Company. However, as described in this Agreement, Executive may be entitled to severance benefits depending on the circumstances of Executive's termination of employment with the Company.

3. Compensation.

(a) Base Salary. During the Employment Term, the Company will pay Executive an annual salary of $300,000 as compensation for her services (the "**Base Salary**"). The Base Salary will be paid periodically in accordance with the Company's normal payroll practices and be subject to the usual, required withholdings. Executive's salary will be subject to review and adjustments at the discretion of the Board based upon the Company's normal performance review practices.

(b) Target Bonus. Executive will be eligible to receive an annual bonus (which shall be prorated for the first year of the Employment Term) up to a maximum of 30% of Executive's Base Salary, as then in effect, less applicable withholdings, with any such bonus to be determined at the sole discretion of the Board upon consideration of achievement of performance objectives to be agreed upon by the Board and Executive within two (2) months of employment (the "**Target Bonus**"). The Target Bonus, or any portion thereof, will be paid as soon as practicable after the Board determines that the Target Bonus has been earned, but in no event shall the Target Bonus be paid after the later of (i) the fifteenth (15th) day of the third (3rd) month following the close of the Company's fiscal year in which the Target Bonus is earned or (ii) March 15 following the calendar year in which the Target Bonus is earned. For clarification, the Target Bonus will not be deemed earned until determined so by the Board.

(c) Stock Option. At the first meeting of the Board following the Effective Date, it will be recommended that Executive be granted a nonstatutory stock option to purchase 708,867 shares of Common Stock at an exercise price equal to the fair market value on the date of grant (the "**Option**"). The number of shares subject to the Option (excluding the 700,000 shares of Common Stock previously issued to Executive pursuant to the RSPA (the "**RSPA Shares**") represents approximately five percent (5%) of the Company's fully diluted common stock (on an as-converted basis) as of July 25, 2012, calculated as if the Option were granted and outstanding as of such date. Subject to the accelerated vesting provisions set forth herein, the Option will vest as to 25% of the shares subject to the Option one (1) year after the Start Date, and as to 1 /48th of the shares subject to the Option monthly thereafter on the same day of the month as the Start Date (and if there is no corresponding day, the last day of the month), so that the Option will be fully vested and exercisable four (4) years from the Start Date, subject to Executive continuing to provide services to the Company in her capacity as Chief Executive Officer through the relevant vesting dates. The Option will be subject to the terms, definitions and provisions of the Company's 2012 Stock Plan (the "**Option Plan**") and the stock option agreement by and between Executive and the Company (the "**Option Agreement**"), both of which documents are incorporated herein by reference. The vesting of the RSPA Shares will continue to be governed by the terms of the RSPA and such vesting shall be independent of that of the Option.

4. Employee Benefits. During the Employment Term, Executive will be entitled to participate in the employee benefit plans, which are as yet to be established and maintained by the Company, of general applicability to other employees of the Company, which shall include standard medical and dental benefits, subject to possible employee contribution of a portion of the cost thereof consistent with that required of employee participants ("**Health Care Benefits**") and vacation accrual, *provided*, *however*, until the time that the Company establishes such Health Care Benefits, the Company will reimburse Executive for Executive and her covered dependants reasonable medical and dental health care premiums. The Company reserves the right to cancel or change the benefit plans and programs it offers to its employees at any time.

5. Expenses. The Company will reimburse Executive for reasonable travel, entertainment or other expenses incurred by Executive in the furtherance of or in connection with the performance of Executive's duties hereunder, in accordance with the Company's expense reimbursement policy as in effect from time to time.

6. Severance.

(a) Termination for other than Cause, Death or Disability. If prior to a Change of Control or after twelve (12) months following a Change of Control, the Company (or any parent or subsidiary or successor of the Company) terminates Executive's employment with the Company other than for Cause, death or disability, then, subject to Section 7, Executive will be entitled to: (i) receive continuing payments of severance pay at a rate equal to Executive's Base Salary, as then in effect, for six (6) months (plus an additional month of severance for each full year of Employment Term (up to a maximum of twelve (12) months of severance pay)) from the date of such termination, which will be paid in accordance with the Company's regular payroll procedures; (ii) if Executive timely elects continuation coverage pursuant to the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended ("**COBRA**") for Executive and Executive's dependents, within the time period prescribed pursuant to COBRA, the Company will reimburse Executive for the COBRA premiums for such coverage for Executive and her covered dependents for six (6) months (plus an additional month of reimbursement for COBRA coverage for each full year of Employment Term (up to a maximum of twelve (12) months of reimbursement), in each case less the amount of monthly employee contribution that applied to Executive prior to the effective date of Executive's termination of employment) from the date of Executive's termination of employment or such earlier date if Executive no longer constitutes a "Qualified Beneficiary" (as such term is defined in Section 4980B(g) of the Code); and (iii) accelerated vesting of such number of shares subject to Executive's Option as would have vested had Executive's employment continued for an additional six (6) months (plus an additional month of vesting for each full year of Employment Term (up to a maximum of twelve (12) months of vesting)) following such termination of employment. In the event the Company does not qualify for COBRA, the benefits received by Executive under (ii) above shall instead be equal to the corresponding amounts of independently obtained health insurance coverage premiums of Executive.

(b) Termination in the Event of a Change of Control. If upon or within twelve (12) months following a Change of Control (i) the Company (or any parent or subsidiary or successor of the Company) terminates Executive's employment with the Company other than for Cause, death or disability, or (ii) the Executive resigns from such employment for Good Reason, then in each such event, subject to Section 7, Executive will be entitled to: (A) receive the

continuing payments of severance pay as described in Section 6(a)(i) above; (B) receive the reimbursements for Executive's COBRA premiums as described in Section 6(a)(ii) above; and (C) if Executive's Option is assumed or an equivalent option is substituted by the Company (or any parent or subsidiary or successor of the Company) following a Change of Control (a "**Continuing Option**"), accelerated vesting as to 100% of the Continuing Option.

(c) Termination for Cause, Death or Disability; Resignation without Good Reason. If Executive's employment with the Company (or any parent or subsidiary or successor of the Company) terminates voluntarily by Executive (except upon resignation for Good Reason upon or within twelve (12) months following a Change of Control), for Cause by the Company or due to Executive's death or disability, then (i) all vesting will terminate immediately with respect to Executive's outstanding equity awards, (ii) all payments of compensation by the Company to Executive hereunder will terminate immediately (except as to amounts already earned), and (iii) Executive will only be eligible for severance benefits in accordance with the Company's established policies, if any, as then in effect.

(d) Exclusive Remedy. In the event of a termination of Executive's employment with the Company (or any parent or subsidiary or successor of the Company), the provisions of this Section 6 are intended to be and are exclusive and in lieu of any other rights or remedies to which Executive or the Company may otherwise be entitled, whether at law, tort or contract, in equity, or under this Agreement. Executive will be entitled to no severance or other benefits upon termination of employment with respect to acceleration of award vesting or severance pay other than those benefits expressly set forth in this Section 6.

7. Conditions to Receipt of Severance; No Duty to Mitigate.

(a) Separation Agreement and Release of Claims. The receipt of any severance pursuant to Section 6(a) or (b) will be subject to Executive signing and not revoking a standard separation agreement and release of claims with the Company (the "**Release**") and provided that such Release becomes effective and irrevocable no later than sixty (60) days following the termination date (such deadline, the "**Release Deadline**"). If the Release does not become effective and irrevocable by the Release Deadline, Executive will forfeit any rights to severance or benefits under this Agreement. In no event will severance payments or benefits be paid or provided until the Release becomes effective and irrevocable.

(b) Nonsolicitation. The receipt of any severance benefits pursuant to Section 6(a) or (b) will be subject to Executive not violating the provisions of Section 10. In the event Executive breaches the provisions of Section 10, all continuing payments and benefits to which Executive may otherwise be entitled pursuant to Section 6(a) or (b) will immediately cease.

(c) Section 409A.

(i) Notwithstanding anything to the contrary in this Agreement, no severance pay or benefits to be paid or provided to Executive, if any, pursuant to this Agreement that, when considered together with any other severance payments or separation benefits, are considered deferred compensation under Code Section 409A, and the final regulations and any guidance promulgated thereunder ("**Section 409**A") (together, the "**Deferred Payments**") will be

paid or otherwise provided until Executive has a "separation from service" within the meaning of Section 409A. Similarly, no severance payable to Executive, if any, pursuant to this Agreement that otherwise would be exempt from Section 409A pursuant to Treasury Regulation Section 1.409A-1(b)(9) will be payable until Executive has a "separation from service" within the meaning of Section 409A.

(ii) Any severance payments or benefits under this Agreement that would be considered Deferred Payments will be paid on, or, in the case of installments, will not commence until, the sixtieth (60^{th}) day following Executive's separation from service, or, if later, such time as required by Section 7(c)(iii). Any installment payments that would have been made to Executive during the sixty (60) day period immediately following Executive's separation from service but for the preceding sentence will be paid to Executive on the sixtieth (60^{th}) day following Executive's separation from service and the remaining payments shall be made as provided in this Agreement.

(iii) Notwithstanding anything to the contrary in this Agreement, if Executive is a "specified employee" within the meaning of Section 409A at the time of Executive's termination (other than due to death), then the Deferred Payments that are payable within the first six (6) months following Executive's separation from service, will become payable on the first payroll date that occurs on or after the date six (6) months and one (1) day following the date of Executive's separation from service. All subsequent Deferred Payments, if any, will be payable in accordance with the payment schedule applicable to each payment or benefit. Notwithstanding anything herein to the contrary, if Executive dies following Executive's separation from service, but prior to the six (6) month anniversary of the separation from service, then any payments delayed in accordance with this paragraph will be payable in a lump sum as soon as administratively practicable after the date of Executive's death and all other Deferred Payments will be payable in accordance with the payment schedule applicable to each payment or benefit. Each payment and benefit payable under this Agreement is intended to constitute a separate payment for purposes of Section 1.409A-2(b)(2) of the Treasury Regulations.

(iv) Any amount paid under this Agreement that satisfies the requirements of the "short-term deferral" rule set forth in Section 1.409A-1(b)(4) of the Treasury Regulations will not constitute Deferred Payments for purposes of clause (i) above.

(v) Any amount paid under this Agreement that qualifies as a payment made as a result of an involuntary separation from service pursuant to Section 1.409A-1 (b)(9)(iii) of the Treasury Regulations that does not exceed the Section 409A Limit (as defined below) will not constitute Deferred Payments for purposes of clause (i) above.

(vi) The foregoing provisions are intended to comply with the requirements of Section 409A so that none of the severance payments and benefits to be provided hereunder will be subject to the additional tax imposed under Section 409A, and any ambiguities herein will be interpreted to so comply. The Company and Executive agree to work together in good faith to consider amendments to this Agreement and to take such reasonable actions which are necessary, appropriate or desirable to avoid imposition of any additional tax or income recognition prior to actual payment to Executive under Section 409A.

(d) Proprietary Information Agreement. Executive's receipt of any payments or benefits under Section 6 will be subject to Executive continuing to comply with the terms of Proprietary Information Agreement (as defined in Section 9).

(e) No Duty to Mitigate. Executive will not be required to mitigate the amount of any payment contemplated by this Agreement, nor will any earnings that Executive may receive from any other source reduce any such payment.

8. Definitions.

(a) Cause. For purposes of this Agreement, "**Cause**" is defined as (i) an act of dishonesty made by Executive in connection with Executive's responsibilities as an employee, (ii) Executive's conviction of, or plea of nolo contendere to, a felony or any crime involving fraud, embezzlement or any other act of moral turpitude, (iii) Executive's gross misconduct, (iv) Executive's unauthorized use or disclosure of any proprietary information or trade secrets of the Company or any other party to whom Executive owes an obligation of nondisclosure as a result of Executive's relationship with the Company; (v) Executive's willful breach of any obligations under any written agreement or covenant with the Company; or (vi) Executive's continued failure to perform her employment duties after Executive has received a written demand of performance from the Company which specifically sets forth the factual basis for the Company's belief that Executive has not substantially performed her duties and has failed to cure such non-performance to the Company's satisfaction within 10 business days after receiving such notice.

(b) Change of Control. For purposes of this Agreement, "**Change of Control**" of the Company is defined as any of the following, whether accomplished through one or a series of related transactions:

(i) a merger or acquisition in which the Company is not the surviving entity, except for a transaction where, (1) the principal purpose of which is to change the State in which the Company is incorporated or (2) the Company's stockholders of record immediately prior to such transaction or series of related transactions hold, immediately after such transaction or series of related transactions, at least 50% of the voting power of the surviving or acquiring entity (*provided* that the sale by the Company of its securities for the purposes of raising additional funds shall not constitute a Change of Control hereunder);

(ii) the sale, transfer or other disposition of all or substantially all of the assets of the Company; or

(iii) any transaction by which 50% or more of the Company's outstanding voting stock is transferred to individuals or entities different from the holders of such stock immediately prior to such transaction (other than affiliates of such holders), including without limitation, any reverse or other merger in which the Company is the surviving entity *(provided* that the transfer of outstanding voting stock for the purposes of, or in connection with, raising additional funds shall not constitute a Change of Control hereunder).

Notwithstanding the foregoing provisions of this definition, a transaction will not be deemed a Change of Control unless the transaction qualifies as a "change in control event" within the meaning of Section 409A.

(c) Code. For purposes of this Agreement, "**Code**" means the Internal Revenue Code of 1986, as amended.

(d) Good Reason. For the purposes of this Agreement, "**Good Reason**" means Executive's resignation within thirty (30) days following the expiration of any Company cure period (discussed below) following the occurrence of one or more of the following, without Executive's express written consent: (i) a material reduction of Executive's duties, position or responsibilities, or the removal of Executive from such position and responsibilities, either of which results in a material diminution of Executive's authority, duties or responsibilities, unless Executive is provided with a comparable position (i.e., a position of equal or greater organizational level, duties, authority, compensation and status); *provided*, *however*, that a reduction in duties, position or responsibilities solely by virtue of the Company being acquired and made part of a larger entity (as, for example, when the Chief Executive Officer of the Company retains a similar position with respect to the Company following a Change of Control but is not made the Chief Executive Officer of the acquiring corporation) will not constitute "Good Reason"; (ii) a material reduction in Executive's Base Salary (in other words, a reduction of more than ten percent (10%) of Executive's Base Salary in any one year); or (iii) a material change in the geographic location of Executive's primary work facility or location; provided, that a relocation of less than fifty (50) miles from Executive's then present location will not be considered a material change in geographic location. Executive will not resign for Good Reason without first providing the Company with written notice of the acts or omissions constituting the grounds for "Good Reason" within ninety (90) days of the initial existence of the grounds for "Good Reason" and a reasonable cure period of not less than thirty (30) days following the date of such notice.

(e) Section 409A Limit. For purposes of this Agreement, "**Section 409A Limit**" will mean the lesser of two (2) times: (i) Executive's annualized compensation based upon the annual rate of pay paid to Executive during the Executive's taxable year preceding the Executive's taxable year of her termination of employment as determined under Treasury Regulation Section 1.409A-l(b)(9)(iii)(A)(l) and any Internal Revenue Service guidance issued with respect thereto; or(ii) the maximum amount that may be taken into account under a qualified plan pursuant to Section 40l(a)(17) of the Internal Revenue Code for the year in which Executive's employment is terminated.

9. Proprietary Information. Executive agrees to enter into a Proprietary Information and Inventions Agreement (the "**Proprietary Information Agreement**") in the form attached hereto as **Exhibit A** upon commencing employment hereunder.

10. Non-Solicitation. Until the date one (1) year after the termination of Executive's employment with the Company for any reason, Executive agrees not, either directly or indirectly, to solicit, induce, attempt to solicit, recruit, or encourage any employee of the Company (or any parent or subsidiary of the Company) to leave his or her employment either for Executive or for any other entity or person. Executive represents that she (i) is familiar with the foregoing covenant not to solicit, and (ii) is fully aware of her obligations hereunder, including, without limitation, the reasonableness of the length of time, scope and geographic coverage of these covenants.

11. Assignment. This Agreement will be binding upon and inure to the benefit of (a) the heirs, executors and legal representatives of Executive upon Executive's death and (b) any successor

of the Company. Any such successor of the Company will be deemed substituted for the Company under the terms of this Agreement for all purposes. For this purpose, "**successor**" means any person, firm, corporation or other business entity which at any time, whether by purchase, merger or otherwise, directly or indirectly acquires all or substantially all of the assets or business of the Company. None of the rights of Executive to receive any form of compensation payable pursuant to this Agreement may be assigned or transferred except by will or the laws of descent and distribution. Any other attempted assignment, transfer, conveyance or other disposition of Executive's right to compensation or other benefits will be null and void.

12. Notices. All notices, requests, demands and other communications called for hereunder will be in writing and will be deemed given (i) on the date of delivery if delivered personally, (ii) one (1) day after being sent by a well established commercial overnight service, or (iii) four (4) days after being mailed by registered or certified mail, return receipt requested, prepaid and addressed to the parties or their successors at the following addresses, or at such other addresses as the parties may later designate in writing:

If to the Company:

Atterocor, Inc.
Attn: Chief Financial Officer at the time
820 Heatherway
Ann Arbor, MI 48104

If to Executive:

at the last residential address of Executive known by the Company.

13. Severability. In the event that any provision hereof becomes or is declared by a court of competent jurisdiction to be illegal, unenforceable or void, this Agreement will continue in full force and effect without said provision.

14. Integration. This Agreement, together with the RSPA, Option Plan, Option Agreement and the Proprietary Information Agreement, represents the entire agreement and understanding between the parties as to the subject matter herein and supersedes all prior or contemporaneous agreements whether written or oral. This Agreement may be modified only by agreement of the parties by a written instrument executed by the parties that is designated as an amendment to this Agreement.

15. Waiver of Breach. The waiver of a breach of any term or provision of this Agreement, which must be in writing, will not operate as or be construed to be a waiver of any other previous or subsequent breach of this Agreement.

16. Indemnification. Subject to Board approval, the Company will enter into an agreement with Executive providing for indemnification of Executive to the extent she is made or is threatened to be made a party to any proceeding by reason of her position with the Company, on terms and conditions approved by the Board.

17. Headings. All captions and section headings used in this Agreement are for convenient reference only and do not form a part of this Agreement.

18. Tax Withholding. All payments made pursuant to this Agreement will be subject to withholding of applicable taxes.

19. Governing Law. This Agreement will be governed by the laws of the State of Michigan (with the exception of its conflict of laws provisions).

20. Acknowledgment. Executive acknowledges that she has had the opportunity to discuss this matter with and obtain advice from her private attorney, has had sufficient time to, and has carefully read and fully understands all the provisions of this Agreement, and is knowingly and voluntarily entering into this Agreement.

21. Counterparts. This Agreement may be executed in counterparts, and each counterpart will have the same force and effect as an original and will constitute an effective, binding agreement on the part of each of the undersigned.

[Signature Page Follows]

IN WITNESS WHEREOF, each of the parties has executed this Agreement, in the case of the Company by their duly authorized officers, as of the day and year first above written.

COMPANY:

ATTEROCOR, INC.

By: /s/ Raili Kerppola Date: July 25, 2012

Name: Raili Kerppola

Title: Treasurer and Secretary

EXECUTIVE:

/s/ Julia Owens Date: July 25, 2012
Julia Owens

[SIGNATURE PAGE TO JULIA OWENS EMPLOYMENT AGREEMENT]

Exhibit 10.53

October 10, 2014

Pharis Mohideen, M.D.
3 Sylvan Drive
Pine Brook, NJ 07058

Re: Employment Terms

Dear Pharis:

Atterocor, Inc. (the "***Company***") is pleased to offer you the position f Chief Medical Officer on the following terms.

You will be responsible for serving on the Company's management committee as the Company's clinical development leader, leading the Company's clinical strategy and activities, ensuring that the Company meets all research, clinical and regulatory milestones and representing the Company both internally and externally to the Board of Directors, investors, partners and the medical/scientific community. You will report to Julia C. Owens, CEO of the Company. Of course, the Company may change your position, duties and work location from time to time in its discretion. During such time as you are resident in a state other than the state in which the Company is headquartered, the Company will reimburse you for expenses incurred by you in connection with your travel to and from the Company's headquarters, *provided, however*, that any such travel expenses that are not within the limits of the Company's travel policy must be approved in advance by the Company's CEO or they will not be reimbursed.

Your compensation will be at an annual salary of $330,000, less payroll deductions and all required withholdings. You will be paid semi-monthly. Because your position is classified as exempt, you will not be eligible for overtime premiums. You will be eligible to receive an annual bonus (which shall be prorated for the fiscal year ending December 31, 2014) up to a maximum of 25% of your total compensation received during the most recently completed fiscal year, less payroll deductions and all required withholdings, with any such bonus to be determined at the sole discretion of the Company and its Board of Directors.

In addition, you will receive a one-time signing bonus of $50,000, $25,000 of which will be paid to you on your first date of employment and the remaining $25,000 (the "***Bonus Balance***") of which will be paid on the one year anniversary of your first date of employment (the "***Anniversary Date***"), *provided, however,* that you must be employed by the Company on the Anniversary Date in order to receive the Bonus Balance.

You will be eligible for standard Company benefit plans, including health insurance coverage upon your start date, a 401(k) savings plan, vacation, holidays and other benefits. Details about these benefit plans are available for your review. The Company may modify compensation and benefits from time to time in its discretion.

The Company intends to grant you, subject to approval by the Company's Board of Directors, a stock option to purchase 358,845 shares (the "***Option***") of Common Stock of the Company at

fair market value as determined by the Board as of the date of grant. The Option will be subject to the terms and conditions of the Company's equity incentive plan and your grant agreement. Your grant agreement will include a four-year vesting schedule, under which 25% of your shares will vest after 12 months of employment, with the remaining shares vesting monthly thereafter, until either your Option is fully vested or your employment ends, whichever occurs first.

If immediately prior to or within 12 months following a Change of Control (as defined below) (i) the Company (or any parent or subsidiary or successor of the Company) terminates your employment with the Company other than for Cause (as defined below), death or disability, or (ii) you resign from such employment for Good Reason (as defined below), then in each such event, subject to the terms herein, (a) you will be entitled to accelerated vesting as to 100% of the Option and (b) the Company will make continued payment of your base salary for a period of six (6) months, at the rate in effect immediately prior to the date of your termination (the "***Cash Severance***"), subject to applicable withholding and in accordance with the Company's regular payroll schedule unless otherwise required by Section 409A of the Internal Revenue Code. If your employment with the Company (or any parent or subsidiary or successor of the Company) is voluntarily terminated by you (except upon resignation for Good Reason upon or within 12 months following a Change of Control), for Cause by the Company or due to your death or disability, then all vesting will terminate immediately with respect to your outstanding equity awards and you will not receive any Cash Severance.

In the event of a termination of your employment with the Company (or any parent or subsidiary or successor of the Company), the provisions of this offer letter are intended to be and are exclusive and in lieu of any other rights or remedies to which your or the Company may otherwise be entitled, whether at law, tort or contract, in equity, or under this offer letter. You will be entitled to no severance or other benefits upon termination of employment with respect to acceleration of award vesting or severance pay other than those benefits expressly set forth herein.

For purposes of this offer letter, "***Cause***" is defined as (i) an act of dishonesty made by you in connection with your responsibilities as an employee, (ii) your conviction of, or plea of nolo contendere to, a felony or any crime involving fraud, embezzlement or any other act of moral turpitude, (iii) your gross misconduct, (iv) your unauthorized use or disclosure of any proprietary information or trade secrets of the Company or any other party to whom you owe an obligation of nondisclosure as a result of your relationship with the Company; (v) your willful breach of any obligations under any written agreement or covenant with the Company; or (vi) your continued failure to perform your employment duties after you have received a written demand of performance from the Company which specifically sets forth the factual basis for the Company's belief that you have not substantially performed your duties and have failed to cure such non-performance to the Company's satisfaction within 10 business days after receiving such notice.

For purposes of this offer letter, a "***Change of Control***" of the Company is defined as any of the following, whether accomplished through one or a series of related transactions: (i) a merger or acquisition in which the Company is not the surviving entity, except for a transaction where, (1) the principal purpose of which is to change the state in which the Company is incorporated or (2) the Company's stockholders of record immediately prior to such transaction or series of related transactions hold, immediately after such transaction or series of related transactions, at least 50% of the voting power of the surviving or acquiring entity (provided that the sale by the Company of its securities for the purposes of raising additional funds shall not constitute a Change of Control hereunder); (ii) the sale, transfer or other disposition of all or substantially all of the assets of the Company; or (iii) any transaction by which 50% or more of the Company's outstanding voting stock is transferred to individuals or entities different from the holders of such stock immediately prior to such transaction (other than affiliates of such holders), including without limitation, any reverse or other merger in which the Company is the surviving entity (provided that the transfer of outstanding voting stock for the purposes of, or in connection with, raising additional funds shall not constitute a Change of Control hereunder). Notwithstanding the foregoing provisions of this definition, a transaction will not be deemed a Change of Control unless the transaction qualifies as a "change in control event" within the meaning of Section 409A of the Internal Revenue Code of 1986, as amended.

For purposes of this offer letter, "***Good Reason***" means your resignation within 30 days following the expiration of any Company cure period (discussed below) following the occurrence of one or more of the following, without your express written consent: (i) a material reduction of your duties, position or responsibilities, or your removal from such position and responsibilities, either of which results in a material diminution of your authority, duties or responsibilities, unless you are provided with a comparable position (i.e., a position of equal or greater organizational level, duties, authority, compensation and status); provided, however, that a reduction in duties, position or responsibilities solely by virtue of the Company being acquired and made part of a larger entity (as, for example, when the Chief Executive Officer of the Company retains a similar position with respect to the Company following a Change of Control but is not made the Chief Executive Officer of the acquiring corporation) will not constitute "Good Reason"; (ii) a material reduction in your base salary (in other words, a reduction of more than 10% of your base salary in any one year); or (iii) a material change in the geographic location of your primary work facility or location; provided, that a relocation of less than 50 miles from your then present location will not be considered a material change in geographic location. You will not resign for Good Reason without first providing the Company with written notice of the acts or omissions constituting the grounds for "Good Reason" within 90 days of the initial existence of the grounds for "Good Reason" and a reasonable cure period of not less than 30 days following the date of such notice.

As a Company employee, you will be expected to abide by Company policies and procedures. As a condition of employment, you must sign and comply with the attached Employee Proprietary Information and Inventions Agreement which prohibits unauthorized use or disclosure of Company proprietary information, among other obligations.

In your work for the Company, you will be expected not to use or disclose any confidential information, including trade secrets, of any former employer or other person to whom you have an obligation of confidentiality. Rather, you will be expected to use only that information which is

generally known and used by persons with training and experience comparable to your own, which is common knowledge in the industry or otherwise legally in the public domain, or which is otherwise provided or developed by the Company. You agree that you will not bring onto Company premises any unpublished documents or property belonging to any former employer or other person to whom you have an obligation of confidentiality. You represent that you have disclosed to the Company any contract you have signed that may restrict your activities on behalf of the Company.

Your employment relationship with the Company is at-will. You may terminate your employment with the Company at any time and for any reason whatsoever simply by notifying the Company. Likewise, the Company may terminate your employment at any time, with or without cause or advance notice. Your employment at-will status can only be modified in a written agreement signed by you and by an officer of the Company.

This offer is contingent upon a background check clearance and satisfactory proof of your right to work in the United States. You agree to assist as needed and to complete any documentation at the Company's request to meet these conditions.

This letter, together with your Employee Proprietary Information and Inventions Agreement, forms the complete and exclusive statement of your employment agreement with the Company. It supersedes any other representations or promises made to you by anyone, whether oral or written. Changes in your employment terms, other than those changes expressly reserved to the Company's discretion in this letter, require a written modification signed by an officer of the Company.

Please sign and date this letter, and the enclosed Employee Proprietary Information and Inventions Agreement, and return them to me by October 13, 2014, if you wish to accept employment at the Company under the terms described above. If you accept our offer, we would like you to start no later than November 1, 2014.

We look forward to your favorable reply and to a productive and enjoyable work relationship.

Sincerely,

/s/ Julia C. Owens
Julia C. Owens, Chief Executive Officer

Accepted:

/s/ Pharis Mohideen
Pharis Mohideen, M.D.

12 Oct 2014
Date

Attachment: Employee Proprietary Information and Inventions Agreement

Exhibit 99.3

Consent of Ladenburg Thalmann & Co. Inc.

November 2, 2018

Board of Directors
OvaScience, Inc.
9 Fourth Avenue
Waltham, MA 02451

Re: Registration Statement on Form S-4 of OvaScience, Inc.

Members of the Board:

We hereby consent to: (i) the inclusion of our opinion letters, dated August 8, 2018 and October 26, 2018, to the Board of Directors of OvaScience, Inc. ("OvaScience") as Annexes B-1 and B-2 to the proxy statement/prospectus/information statement that forms part of the Registration Statement on Form S-4 of OvaScience (the "Registration Statement") initially filed on September 26, 2018, as amended; and (ii) the references made to our firm and such opinions in such Registration Statement under the captions "Prospectus Summary—Opinions of the OvaScience Financial Advisor," "The Merger—Background of the Merger," "The Merger—OvaScience Reasons for the Merger" and "The Merger—Opinions of the OvaScience Financial Advisor." Notwithstanding the foregoing, in giving such consent, we do not admit and we hereby disclaim that we come within the category of persons whose consent is required under Section 7 of the Securities Act of 1933, as amended, or the rules and regulations of the Securities and Exchange Commission thereunder, nor do we hereby admit that we are experts with respect to any part of such Registration Statement within the meaning of the term "experts" as used in the Securities Act of 1933, as amended, or the rules and regulations of the Securities and Exchange Commission promulgated thereunder.

Very truly yours,

/s/ Ladenburg Thalmann & Co. Inc.
LADENBURG THALMANN & CO. INC.

LADENBURG THALMANN & CO. INC.
277 Park Avenue, 26th Floor
New York, NY 10172
Phone 212.409.2000 • Fax 212.308.2203