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As confidentially submitted to the Securities and Exchange Commission on June 15, 2018, as Amendment No. 5 to the draft registration statement.
This draft registration statement has not been publicly filed with the Securities and Exchange Commission and all information herein remains confidential.

Registration No. 333-

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

Form S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

Liquidia Technologies, Inc.
(Exact name of registrant as specified in its charter)

Delaware	**2836**	**20-1926605**
(State or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification Number)

419 Davis Drive, Suite 100
Morrisville, North Carolina 27560
Telephone: (919) 328-4400
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Neal F. Fowler
Chief Executive Officer
Liquidia Technologies, Inc.
419 Davis Drive, Suite 100
Morrisville, North Carolina 27560
Telephone: (919) 328-4400
(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Andrew P. Gilbert
David C. Schwartz
DLA Piper LLP (US)
51 John F. Kennedy Parkway, Suite 120
Short Hills, New Jersey 07078
(973) 520-2550

Brent B. Siler
Brian Leaf
Divakar Gupta
Cooley LLP
1299 Pennsylvania Avenue NW,
Suite 700
Washington, DC 20004
(202) 842-7800

Approximate date of commencement of proposed sale to the public:
As soon as practicable after the effective date of this registration statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933 check the following box. o

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

If this Form is a post-effective amendment filed pursuant to Rule 462(c) 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. o

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. o

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.

Large accelerated filer o	Accelerated filer o	Non-accelerated filer ☒ (Do not check if a smaller reporting company)	Smaller reporting company o 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 7(a)(2)(B) of the Securities Act. ☒

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Proposed Maximum Aggregate Offering Price[1][2]	Amount of Registration Fee[3]
Common stock, par value $0.001 per share	$	$

(1) Estimated solely for the purpose of calculating the registration fee in accordance with Rule 457(o) under the Securities Act of 1933.

(2) Includes shares subject to the underwriters' option to purchase additional shares.

(3) Calculated pursuant to Rule 457(o) based on an estimate of the proposed maximum aggregate offering price.

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

Explanatory Note

Liquidia Technologies, Inc. has prepared this Amendment No. 5 to its draft registration statement on Form S-1, as amended (this "Amendment No. 5"), as most recently confidentially submitted to the Securities and Exchange Commission on May 10, 2018 (the "Draft Registration Statement"), solely for the purpose of refiling Exhibits 10.14, 10.15 and 10.20, and making corresponding updates to Item 16 and the Exhibit Index of the Draft Registration Statement. This Amendment No. 5 does not modify any provision of the prospectus that forms Part I of the Draft Registration Statement and accordingly such prospectus has not been included herein.

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. *Other Expenses of Issuance and Distribution*

The following table indicates the expenses to be incurred in connection with the offering described in this registration statement, other than underwriting discounts and commissions, all of which will be paid by us. All amounts are estimated except the U.S. Securities and Exchange Commission, or the SEC, registration fee, the FINRA filing fee and Nasdaq listing fee.

	Amount
SEC registration fee	$ *
FINRA filing fee	*
Nasdaq listing fee	*
Accountants' fees and expenses	*
Legal fees and expenses	*
Blue Sky fees and expenses	*
Transfer agent's fees and expenses	*
Printing and engraving expenses	*
Miscellaneous	*
Total expenses	$ *

* To be filed by amendment.

Item 14. *Indemnification of Directors and Officers.*

Section 102 of the Delaware General Corporation Law, or the DGCL, permits a corporation to eliminate the personal liability of directors of a corporation to the corporation or its stockholders for monetary damages for a breach of fiduciary duty as a director, except where the director breached his duty of loyalty, failed to act in good faith, engaged in intentional misconduct or knowingly violated a law, authorized the payment of a dividend or approved a stock repurchase in violation of Delaware corporate law or obtained an improper personal benefit. Our amended and restated certificate of incorporation will provide that no director of the Registrant shall be personally liable to it or its stockholders for monetary damages for any breach of fiduciary duty as a director, notwithstanding any provision of law imposing such liability, except to the extent that the DGCL prohibits the elimination or limitation of liability of directors for breaches of fiduciary duty.

Section 145 of the DGCL provides that a corporation has the power to indemnify a director, officer, employee or agent of the corporation, or a person serving at the request of the corporation for another corporation, partnership, joint venture, trust or other enterprise in related capacities against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with an action, suit or proceeding to which he was or is a party or is threatened to be made a party to any threatened, ending or completed action, suit or proceeding by reason of such position, if such person acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation, and, in any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful, except that, in the case of actions brought by or in the right of the corporation, no indemnification shall be made with respect to 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 other adjudicating court determines that, despite the adjudication of liability

but in view of all of 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.

Upon completion of this offering, our amended and restated certificate of incorporation and amended and restated bylaws will provide indemnification for our directors and officers to the fullest extent permitted by the DGCL. We will indemnify 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 (other than an action by or in the right of us) by reason of the fact that he or she is or was, or has agreed to become, a director or officer, or is or was serving, or has agreed to serve, at our request as a director, officer, partner, employee or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise (all such persons being referred to as an Indemnitee), or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred in connection with such action, suit or proceeding and any appeal therefrom, if such Indemnitee acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, our best interests, and, with respect to any criminal action or proceeding, he or she had no reasonable cause to believe his or her conduct was unlawful. Our amended and restated certificate of incorporation and amended and restated bylaws will provide that we will indemnify any Indemnitee who was or is a party to an action or suit by or in the right of us to procure a judgment in our favor by reason of the fact that the Indemnitee is or was, or has agreed to become, a director or officer, or is or was serving, or has agreed to serve, at our request 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) and, to the extent permitted by law, amounts paid in settlement actually and reasonably incurred in connection with such action, suit or proceeding, and any appeal therefrom, if the Indemnitee acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, our best interests, except that no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to us, unless a court determines that, despite such adjudication but in view of all of the circumstances, he or she is entitled to indemnification of such expenses. Notwithstanding the foregoing, to the extent that any Indemnitee has been successful, on the merits or otherwise, he or she will be indemnified by us against all expenses (including attorneys' fees) actually and reasonably incurred in connection therewith. Expenses must be advanced to an Indemnitee under certain circumstances.

Prior to the completion of this offering, we intend to enter into separate indemnification agreements with each of our directors and certain officers. Each indemnification agreement will provide, among other things, for indemnification to the fullest extent permitted by law and our amended and restated certificate of incorporation and amended and restated bylaws against any and all expenses, judgments, fines, penalties and amounts paid in settlement of any claim. The indemnification agreements will provide for the advancement or payment of all expenses to the indemnitee and for the reimbursement to us if it is found that such indemnitee is not entitled to such indemnification under applicable law and our amended and restated certificate of incorporation and amended and restated bylaws.

We maintain a general liability insurance policy that covers certain liabilities of directors and officers of our corporation arising out of claims based on acts or omissions in their capacities as directors or officers.

In any underwriting agreement we enter into in connection with the sale of common stock being registered hereby, the underwriters will agree to indemnify, under certain conditions, us, our directors, our officers and persons who control us within the meaning of the Securities Act of 1933, as amended, or the Securities Act, against certain liabilities.

Item 15. ***Recent Sales of Unregistered Securities.***

The following sets forth information as to all securities we have sold since June 15, 2015, which were not registered under the Securities Act.

Series D Preferred Stock

On February 2, 2018, we issued and sold an aggregate of 82,560,006 shares of Series D preferred stock at a price per share equal to $0.59808. Of the 27 investors which participated in the initial closing of this offering, six investors purchased an aggregate of 34,276,349 shares of Series D preferred stock for an aggregate of $20.5 million and 26 holders of outstanding convertible notes in the aggregate amount of $28.9 million converted into an aggregate of 48,283,657 shares of Series D preferred stock.

Pursuant to the terms of the Series D Preferred Stock Purchase Agreement, on February 15, 2018 we sold 8,360,085 shares of Series D preferred stock to an accredited investor for a total purchase price of $5.0 million.

Additionally, pursuant to the terms of the Series D Preferred Stock Purchase Agreement, we offered our existing stockholders who are accredited investors the opportunity to purchase their pro rata portion of the Series D preferred stock in a rights offering. On February 28, 2018, we sold an aggregate of 227,391 shares of Series D preferred stock for an aggregate purchase price of $135,998.

We claimed an exemption from registration under the Securities Act for the issuance and sale of the Series D preferred stock under Section 4(a)(2) of the Securities Act in that such sales and issuances do not involve a public offering.

Unsecured Subordinated Convertible Promissory Notes

In a series of closings from January 9, 2017 to November 29, 2017, we issued and sold an aggregate of approximately $27.4 million underlying a total of 27 unsecured subordinated convertible promissory notes, each accruing simple interest at a rate of 8% per annum, or the Notes. See "Description of Capital Stock — Common Stock" for more information.

We claimed an exemption from registration under the Securities Act for the issuance and sale of the Notes under Section 4(a)(2) of the Securities Act in that such sales and issuances did not involve a public offering.

Warrants

In connection with the closings of the Notes from January 9, 2017 to February 17, 2017, we issued and sold 17 warrants to purchase an aggregate of 3,698,128 shares of our Series C-1 preferred stock at an exercise price of $0.001 per share which are convertible into an aggregate of 4,394,914 shares of common stock. See "Description of Capital Stock — Warrants" for more information.

On July 6, 2017, a warrant holder exercised a warrant issued on July 10, 2017 for 20,000 shares of our common stock.

We claimed an exemption from registration under the Securities Act for the issuance and sale of such warrants under Section 4(a)(2) of the Securities Act in that such sales and issuances did not involve a public offering.

Options

On August 27, 2015, we granted incentive stock options to eight employees and one director to purchase an aggregate of 960,362 shares of common stock under our 2004 Plan, with an exercise price equal to $0.28 per share. 239,766 of such option shares have subsequently been exercised for common stock.

On November 3, 2015, we granted incentive stock options to nine employees to purchase an aggregate of 713,161 shares of common stock under our 2004 Plan, with an exercise price equal to $0.28 per share. 30,000 of such option shares have subsequently been exercised for common stock. 168,400 of such option shares were terminated without being exercised.

On February 10, 2016, we granted incentive stock options to six employees to purchase an aggregate of 662,756 shares of common stock under our 2004 Plan, with an exercise price equal to $0.35 per share. 2,858 of such option shares have subsequently been exercised for common stock. 37,137 of such option shares were terminated without being exercised.

On August 10, 2016, we granted incentive stock options to eight employees to purchase an aggregate of 465,617 shares of common stock under the Liquidia Technologies, Inc. 2016 Equity Incentive Plan, as amended, or the 2016 Plan, with an exercise price equal to $0.35 per share.

On August 30, 2016, we granted incentive stock options to three employees to purchase an aggregate of 235,000 shares of common stock under the 2016 Plan, with an exercise price equal to $0.35 per share.

On December 7, 2016, we granted a non-statutory stock option to Arthur Kirsch, a director, to purchase 150,000 shares of common stock under the 2016 Plan, with an exercise price equal to $1.21 per share.

On March 15, 2017, we granted incentive stock options to seven employees to purchase an aggregate of 219,000 shares of common stock under the 2016 Plan, with an exercise price equal to $1.21 per share. 9,000 of such option shares were terminated without being exercised.

On May 31, 2017, we granted an incentive stock option to an employee to purchase 18,000 shares of common stock under the 2016 Plan, with an exercise price equal to $1.21 per share.

On March 7, 2018, we granted incentive stock options to 64 employees to purchase an aggregate of 11,835,767 shares of common stock under the 2016 Plan, with an exercise price equal to $0.55 per share. Included in these 64 grants were grants to: (i) Neal Fowler, our Chief Executive Officer, for 3,900,000 shares; (ii) Kevin Gordon, our President and Chief Financial Officer, for 2,146,767 shares; (iii) Robert Lippe, our Chief Operations Officer, for 735,000 shares; (iv) Dr. Robert Roscigno, our Senior Vice President, Product Development, for 600,000 shares; (v) Dr. Benjamin Maynor, our Senior Vice President, Research and Development, for 700,000 shares; (vi) Jason Adair, our Vice President, Business Development and Strategy, for 350,000 shares; and (vii) Timothy Albury, our Senior Vice President, Chief Accounting Officer, for 514,000 shares.

On March 7, 2018, we also granted non-statutory stock options to four directors to purchase an aggregate of 1,810,000 shares of common stock under the 2016 Plan, with an exercise price equal to $0.55 per share. These four grants comprised grants to: (i) Arthur Kirsch, for 135,000 shares; (ii) Dr. Seth Rudnick, for 930,000 shares; (iii) Dr. Ralph Snyderman, for 460,000 shares; and (iv) Raman Singh, for 285,000 shares.

On March 7, 2018, in connection with his employment agreement, we granted Mr. Gordon 2,146,767 restricted stock units, equal to one percent of our issued and outstanding capital stock on a fully-diluted basis on the date of grant. Further, pursuant to his employment agreement, on the date of execution of the underwriting agreement Mr. Gordon is also entitled to (i) a stock option award under the Liquidia Technologies, Inc. 2018 Long-Term Incentive Plan, or the 2018 Plan, to purchase shares of our common stock equal to 1% of our capital stock on a fully-diluted basis on the date of grant (shares assuming we sell shares in this offering) with an exercise price per share equal to the initial public offering price, and (ii) a restricted stock unit award equal to 1% of our capital stock on a fully-diluted basis on the date of grant (shares assuming we sell shares in this offering).

We claimed exemption from registration under the Securities Act for the sales and issuances of securities in the transactions described above under Section 4(a)(2) of the Securities Act in that such sales and issuances did not involve a public offering or under Rule 701 promulgated under the Securities Act, or Rule 701, in that they were offered and sold either pursuant to written compensatory plans or pursuant to a written contract relating to compensation, as provided by Rule 701.

On the date of execution of the underwriting agreement, in addition to the option to be granted to Mr. Gordon upon the closing of this offering we expect to grant, under the 2018 Plan to certain of our officers and directors, an aggregate of shares of common stock issuable upon the exercise of stock options.

On March 27, 2018, we granted incentive stock options to two employees to purchase an aggregate of 25,000 shares of Common Stock under our 2016 Plan, with an exercise price equal to $0.55 per share.

On May 10, 2018, on a net basis, Mr. Fowler exercised an option granted on May 12, 2008 under the 2004 Plan, resulting in 257,057 shares of our common stock being issued to Mr. Fowler.

Since June 15, 2015, 4,829,125 shares of common stock have been issued upon the exercise of stock options pursuant to the 2004 Plan and no shares of common stock have been issued upon the exercise of stock options pursuant to the 2016 Plan.

All of the foregoing securities are deemed restricted securities for purposes of the Securities Act. All certificates representing the issued securities described in this Item 15 included appropriate legends setting forth that the securities had not been registered and the applicable restrictions on transfer.

Item 16. ***Exhibits and Financial Statement Schedules.***

(a) The following exhibits are filed as part of this Registration Statement:

Exhibit Number	Description
1.1*	Form of Underwriting Agreement.
3.1**	Amended and Restated Certificate of Incorporation currently in effect.
3.2**	Certificate of Correction to the Amended and Restated Certificate of Incorporation currently in effect.
3.3*	Form of Amended and Restated Certificate of Incorporation, to be in effect after the consummation of this offering.
3.3**	Bylaws, as amended, currently in effect.
3.4*	Form of Amended and Restated Bylaws, to be in effect after the consummation of this offering.
4.1**	Form of Specimen Common Stock Certificate.
4.2**	2016 Letter Agreement Promissory Note, issued by the Company to The University of North Carolina at Chapel Hill on June 10, 2016, as amended on December 2, 2017.
4.3**	Form of Warrant to Purchase Shares of Series B Preferred Stock, issued by the Company on March 28, 2008.
4.4**	Form of Warrant to Purchase Shares of Series C-1 Preferred Stock, issued by the Company in January 2017 and February 2017.
4.5**	Seventh Amended and Restated Investors' Rights Agreement, dated as of February 2, 2018, by and among the Company, the Investors party thereto and the Common Holders party thereto.
5.1*	Opinion of DLA Piper LLP (US).

Exhibit Number	Description
10.1**	Liquidia Technologies, Inc. Stock Option Plan (2004), as amended, and forms of award agreements thereunder.
10.2**	Liquidia Technologies, Inc. 2016 Equity Incentive Plan, as amended, and forms of award agreements thereunder.
10.3*	Liquidia Technologies, Inc. 2018 Long-Term Incentive Plan, and forms of award agreements thereunder.
10.4**	Form of Indemnification Agreement with the Company's executive officers and directors.
10.5**	Loan and Security Agreement, dated as of January 6, 2016, by and between the Company and Pacific Western Bank.
10.6**	Second Amendment to Loan and Security Agreement, dated as of October 12, 2016, by and between the Company and Pacific Western Bank.
10.7**	Third Amendment to Loan and Security Agreement, dated as of December 28, 2016, by and between the Company and Pacific Western Bank.
10.8**	Fourth Amendment to Loan and Security Agreement, dated as of March 30, 2017, by and between the Company and Pacific Western Bank.
10.9**	Fifth Amendment to Loan and Security Agreement, dated as of April 28, 2017, by and between the Company and Pacific Western Bank.
10.10**	Sixth Amendment to Loan and Security Agreement, dated as of June 14, 2017, by and between the Company and Pacific Western Bank.
10.11**	Seventh Amendment to Loan and Security Agreement, dated as of October 27, 2017, by and between the Company and Pacific Western Bank.
10.12**	Eighth Amendment to Loan and Security Agreement, dated as of November 30, 2017, by and between the Company and Pacific Western Bank.
10.13**	Ninth Amendment to Loan and Security Agreement, dated as of March 29, 2018 by and between the Company and Pacific Western Bank.
10.14+	Inhaled Collaboration and Option Agreement, dated as of June 15, 2012, by and between the Company and Glaxo Group Limited.
10.15+	Amendment No. 1 to the Inhaled Collaboration and Option Agreement, dated as of May 13, 2015, by and between the Company and Glaxo Group Limited.
10.16+**	Second Amendment to the Inhaled Collaboration and Option Agreement, dated as of November 19, 2015, by and between the Company and Glaxo Group Limited.
10.17+**	Amended and Restated License Agreement, dated as of December 15, 2008, by and between the Company and The University of North Carolina at Chapel Hill.
10.18+**	First Amendment to Amended and Restated License Agreement, dated as of June 8, 2009, by and between the Company and The University of North Carolina at Chapel Hill.
10.19**	Sixth Amendment to Amended and Restated License Agreement, dated as of June 10, 2016, by and between the Company and The University of North Carolina at Chapel Hill.
10.20+	Manufacturing Development and Scale-up Agreement, dated as of March 19, 2012, by and between the Company and Chasm Technologies, Inc.
10.21+**	1st Amendment to Manufacturing Development and Scale-up Agreement, dated as of May 25, 2017, by and between the Company and Chasm Technologies, Inc.

Exhibit Number	Description
10.22#**	Amended and Restated Executive Employment Agreement, dated as of January 31, 2018, by and between the Company and Neal Fowler.
10.23#**	Executive Employment Agreement, dated as of January 22, 2018, by and between the Company and Kevin Gordon.
10.24#**	Executive Employment Agreement, dated as of April 1, 2017, by and between the Company and Robert Lippe.
10.25#**	Form of Amended and Restated Executive Employment Agreement to be entered into between the Company and Robert Lippe.
10.26#**	Amended and Restated Executive Employment Agreement, effective January 22, 2018, by and between the Company and Timothy Albury.
10.27#**	Form of Amended and Restated Executive Employment Agreement to be entered into between the Company and Timothy Albury.
10.28#**	Liquidia Technologies, Inc. Annual Cash Bonus Plan.
10.29#**	Executive Severance and Change in Control Plan.
10.30**	Lease Agreement, dated as of April 14, 2005, by and between the Company and Technology VII-IX, LLC, as amended.
10.31**	Lease Agreement, dated as of June 29, 2007, by and between the Company and GRE Keystone Technologies One LLC, as amended.
23.1*	Consent of PricewaterhouseCoopers LLP, independent Registered Public Accounting Firm.
23.2*	Consent of DLA Piper LLP (US) (included in Exhibit 5.1).
23.3**	Consent of Decision Resources Group.
23.4**	Consent of CapVal-American Business Appraisers, LLC.
24.1*	Power of Attorney (included on signature page).

* To be filed by amendment.

** Previously filed.

\+ Application has been made to the Securities and Exchange Commission for confidential treatment of certain portions. Omitted material for which confidential treatment has been requested has been filed separately with the Securities and Exchange Commission.

\# Indicates management contract or compensatory plan.

Item 17. ***Undertakings.***

The undersigned registrant hereby undertakes to provide to the underwriters at the closing specified in the underwriting agreement certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.

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 Securities and Exchange Commission such indemnification is against public policy as expressed in the 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 of 1933, as amended, and will be governed by the final adjudication of such issue.

The undersigned registrant hereby undertakes that:

(1) The registrant will provide to the underwriter at the closing as specified in the underwriting agreement certificates in such denominations and registered in such names as required by the underwriter to permit prompt delivery to each purchaser.

(2) For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the Registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

(3) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus 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.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant certifies that it has reasonable grounds to believe that it meets all the requirements for filing on Form S-1 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the Town of Morrisville, State of North Carolina, on this day of , 2018.

By: _____

Name: Neal Fowler
Title: *Chief Executive Officer*

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints each of Neal Fowler and Kevin Gordon his true and lawful attorney-in-fact, with full power of substitution and resubstitution for him and in his name, place and stead, in any and all capacities to sign any and all amendments including post-effective amendments to this registration statement (including, without limitation, any additional registration statement filed pursuant to Rule 462 under the Securities Act of 1933), and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that said attorney-in-fact or his substitute, each acting alone, may lawfully do or cause to be done by virtue thereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Name	Position	Date
Neal Fowler	Director and Chief Executive Officer (Principal Executive Officer)	, 2018
Kevin Gordon	President and Chief Financial Officer (Principal Financial Officer)	, 2018
Timothy Albury	Senior Vice President, Chief Accounting Officer (Principal Accounting Officer)	, 2018
Seth Rudnick	Chairman of the Board of Directors	, 2018
Stephen Bloch	Director	, 2018

Name	Position	Date
_____ Edward Mathers	Director	, 2018
_____ Isaac Cheng	Director	, 2018
_____ Ralph Snyderman	Director	, 2018
_____ Arthur Kirsch	Director	, 2018
_____ Jason Rushton	Director	, 2018
_____ Raman Singh	Director	, 2018

QuickLinks

Exhibit 10.14

Confidential treatment has been requested with respect to portions of this agreement as indicated by "[***]" and such confidential portions have been deleted and filed separately with the Securities and Exchange Commission pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

EXECUTION COPY
CONFIDENTIAL

INHALED COLLABORATION AND OPTION AGREEMENT

This **INHALED COLLABORATION AND OPTION AGREEMENT** (the "**Agreement**") is entered into as of June 15, 2012 (the **"Effective Date"**) by and between **LIQUIDIA TECHNOLOGIES, INC.**, a Delaware corporation, having its principal place of business at 419 Davis Dr., Suite 100, Morrisville, NC 27560 ("**Liquidia**"), and **GLAXO GROUP LIMITED**, a company organized and existing under the laws of England and having an office and place of business at Glaxo Wellcome House, Berkeley Avenue, Greenford, Middlesex, UB6 ONN, United Kingdom ("**GSK**"). Liquidia and GSK are sometimes referred to herein individually as a "**Party**" and collectively as the "**Parties**."

RECITALS

WHEREAS, Liquidia controls certain technology for the formulation and/or delivery of small molecule, diagnostic, or biologic constructs, generally known as its PRINT platform technology, including PRINT particles, particle formulations, and PRINT processing technology;

WHEREAS, GSK possesses resources and expertise in the research, development, marketing, and commercialization of pharmaceutical products, and desires to develop pharmaceutical products using Liquidia's PRINT platform;

WHEREAS, Liquidia and GSK desire to collaborate on research regarding application of Liquidia's PRINT platform to pharmaceutical products upon the terms and conditions set forth herein;

WHEREAS, Liquidia desires to grant to GSK certain exclusive options and licenses as further described in this Agreement with respect to certain of Liquidia's intellectual property rights to enable GSK to further develop Research Products and commercialize Inhaled Products on the terms and conditions set forth herein; and

WHEREAS, Liquidia and GlaxoSmithKline Biologicals S.A. have entered into the Vaccine Collaboration Agreement (as defined below), and the Joint Steering Committee (as defined below) will oversee the Collaboration Program conducted under both this Agreement and the Vaccine Collaboration Agreement.

NOW, THEREFORE, in consideration of the foregoing premises and the mutual covenants and conditions contained in this Agreement, the Parties agree as follows:

ARTICLE 1
DEFINITIONS

Unless the context otherwise requires, the terms in this Agreement with initial letters capitalized, shall have the meanings set forth below, or the meaning as designated in the indicated places throughout this Agreement.

Confidential treatment has been requested with respect to portions of this agreement as indicated by "[***]" and such confidential portions have been deleted and filed separately with the Securities and Exchange Commission pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

1.1 "Acceptable Label" means, for an applicable Product, a label for such Product as issued and approved by the applicable Regulatory Authority and acceptable to GSK in its sole discretion.

1.2 "Acquiror" has the meaning set forth in Section 17.5(a).

1.3 "Action" has the meaning set forth in Section 11.6(b)(i).

1.4 "Affiliate" means, with respect to a particular Party, a person, corporation, partnership, or other entity that controls, is controlled by or is under common control with such Party. For the purposes of this definition, the word "control" (including, with correlative meaning, the terms "controlled by" or "under common control with") means the actual power, either directly or indirectly through one or more intermediaries, to direct or cause the direction of the management and policies of such entity, whether by the ownership of fifty percent (50%) or more (or such lesser percentage which is the maximum allowed to be owned by a person, corporation, partnership or other entity in a particular jurisdiction) of the voting stock of such entity, or by contract or otherwise.

1.5 "Agreement" has the meaning set forth in the preamble.

1.6 "Alliance Manager" has the meaning set forth in Section 2.3.

1.7 "Anti-Corruption Laws" means the Foreign Corrupt Practices Act of 1977 and the UK Bribery Act, and any similar Laws in jurisdictions other than the U.S. and United Kingdom.

1.8 "Antigen" means any material that induces an adaptive immune response specific to itself. **"Antigen(s)"** includes antigens from viruses, bacteria, parasites, self or addiction as a Vaccine target. **"Antigen"** shall exclude the following: (a) antigens expressed from DNA or RNA *in vivo* (where the DNA or RNA is not in a live vector); (b) Free Polysaccharide; and (c) live replicating virus when the virus is contained in PRINT Material. For the sake of

clarity, the Antigens included in the scope of the Vaccines Option granted to GSK hereunder encompass pre-conjugated polysaccharides and other live vectors.

1.9 **"Bankruptcy Code"** has the meaning set forth in Section 15.4.

1.10 **"BLA"** means a Biologicals License Application (as more fully defined in 21 C.F.R. 601 *et. seq*., or its successor provisions) and all amendments and supplements thereto.

1.11 **"BMGF"** means the Bill & Melinda Gates Foundation.

1.12 **"BMGF Letter Agreement"** means the letter agreement between Liquidia and BMGF dated February 18, 2011, as amended October 25, 2011.

1.13 **"Business Day"** means a day on which banking institutions in London, England and New York, New York are open for business, but excluding the nine (9) consecutive calendar days beginning on December 24th and continuing through January 1st of each calendar year during the Term, and all Saturdays and Sundays.

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1.14 **"Chairperson"** has the meaning set forth in Section 2.1(a).

1.15 **"Change of Control"** means the occurrence of any of the following: (a) a Party enters into a merger, consolidation, stock sale or sale or transfer of all or substantially all of its assets to which this Agreement relates, or other similar transaction or series of transactions with a Third Party; or (b) any transaction or series of related transactions in which any Third Party or group of Third Parties acquires beneficial ownership of securities of a Party representing more than fifty percent (50%) (or such lesser percentage which is the maximum allowed to be owned by a Third Party in a particular jurisdiction) of the combined voting power of the then outstanding securities of such Party. Notwithstanding the foregoing, a stock sale to underwriters of a public offering of a Party's capital stock or a stock sale to Third Parties solely for the purpose of financing or a transaction solely to change the domicile of a Party shall not constitute a Change of Control.

1.16 **"Claims"** has the meaning set forth in Section 13.1.

1.17 **"Clinical Trial"** means any human clinical trial of a Research Product or Liquidia Respiratory Product.

1.18 **"CMC"** has the meaning set forth in Section 7.1.

1.19 **"Co-Delivery Vaccine Field"** has the meaning set forth in the Vaccine Collaboration Agreement.

1.20 **"COGS"** means the Standard Cost of manufacture and supply of the PRINT Material used in the Products, calculated annually for the period January 1st to December 31st, in accordance with IFRS. For purposes of this definition, **"Standard Cost"** means the sum of the Direct Costs and Indirect Costs attributable to the supply of the PRINT Material used in the Products. **"Direct Costs"** include those components that can be specifically identified as either raw ingredients, bought in intermediates or finishing supplies necessary to produce the PRINT Materials and the man hours necessary to perform the actual process of manufacturing the PRINT Materials (including processing and packaging, equipment operators, line mechanics, set up mechanics and material handlers to supply the line). **"Indirect Costs"** include those costs related directly to the manufacture and supply of the PRINT Materials, other than Direct Costs, including external tolling fees and other third party manufacturing expenses, shipping, insurance and quality control, as well as costs for the PRINT Materials that exist regardless of whether or not the supply occurs, including depreciation (which reflects on a *pro rata* basis the use of assets used for manufacture and supply of the product), utilities (e.g. electricity), facility maintenance, supervisory staff, warehouse allocations, plant support staff, corporate allocations, systems support and technical support for labor, in each case to the extent attributable to the manufacture and supply of the PRINT Materials. For clarity, "Standard Costs" do not include the following: plant costs incurred due to rework of the PRINT Materials, with the exception of a reasonable allowance in line with historical performance; value of PRINT Materials discarded in the manufacturing process (other than process related scrap); costs related to manufacturing process development; allocations of overhead incurred outside of the manufacturing and supply process such as support, business development, accounting, taxes and legal; and selling and administrative expenses.

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1.21 **"Collaboration Costs"** has the meaning set forth in Section 3.4.

1.22 **"Collaboration Know-How"** has the meaning set forth in Section 11.3.

1.23 **"Collaboration Program"** means the conduct of both the Inhaled Collaboration and Vaccine Collaboration.

1.24 **"Combination"** has the meaning set forth in Section 1.109.

1.25 **"Commercial Supply Agreement"** has the meaning set forth in Section 9.2.

1.26 **"Commercially Reasonable Efforts"** means, with respect to a Party, such efforts that are consistent with the efforts and resources generally used by such Party in the exercise of its reasonable business discretion relating to the research, development and commercialization of a

pharmaceutical product owned by it or to which it has exclusive rights, with similar product characteristics, which is of similar market potential at a similar stage in its development or product life, taking into account issues of patent coverage, safety and efficacy, product profile, the competitiveness of the marketplace, the proprietary position of the compound or product, the regulatory structure involved, the potential or actual profitability of the applicable products (including pricing and reimbursement status achieved or to be achieved), and other relevant factors, including technical, legal, scientific and/or medical factors. For purposes of clarity, Commercially Reasonable Efforts would be determined on a market-by-market and indication-by-indication basis for a particular Research Product or Product and it is anticipated that the level of effort may be different for different markets and may change over time, reflecting changes in the status of the Research Product or Product and the market(s) involved.

1.27 **"Committee Party(ies)"** has the meaning set forth in Section 2.1.

1.28 **"Confidential Information"** of a Party means any and all Know-How of such Party that is disclosed to the other Party under this Agreement, whether in oral, written, graphic, or electronic form. All Know-How disclosed by either Party pursuant to the Confidential Disclosure Agreement between the Parties dated March 9, 2011, and Amendment #1 To Confidential Disclosure Agreement dated January 25, 2012 (collectively, the "**Confidentiality Agreement**") shall be deemed to be such Party's Confidential Information disclosed hereunder.

1.29 **"Consulting Agreement"** means the Consulting Agreement between Liquidia and Joseph M. DeSimone (the **"Consultant"**), dated June 8, 2004, as amended.

1.30 **"Control"** means, with respect to any material, Know-How, Patent or other intellectual property right, that a Party (a) owns or (b) has a license (other than a license granted to such Party under this Agreement) to such material, Know-How, Patent or other intellectual property right and, in each case, has the ability to grant to the other Party access, a license, or a sublicense (as applicable) to the foregoing on the terms and conditions set forth in this Agreement without violating the terms of any then-existing agreement or other arrangement with any Third Party.

1.31 **"CPR"** has the meaning set forth in Section 16.3.

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1.32 **"Development Delay"** has the meaning set forth in Section 6.2.

1.33 **"Development Supply Agreement"** has the meaning set forth in Section 9.1(b).

1.34 **"Disease Field"** has the meaning set forth in the Vaccine Collaboration Agreement.

1.35 **"Dollar"** means a U.S. dollar, and "**$**" shall be interpreted accordingly.

1.36 **"Effective Date"** has the meaning set forth in the preamble.

1.37 **"EMA"** means the European Medicines Agency or any successor entity.

1.38 **"Enforcing Party"** has the meaning set forth in Section 11.6(b)(iii).

1.39 **"EU"** or **"European Union"** means the European Union member states as then constituted.

1.40 **"Excluded Applications"** has the meaning set forth in the Vaccine Collaboration Agreement.

1.41 **"Executive Officer"** means, with respect to Liquidia, its Chief Executive Officer, with respect to GSK, its Senior Vice President of Platform Technology and Science, and with respect to GSK Bio, its Senior Vice President Research and Development Prophylactic Vaccines, or in each case, such Executive Officer's designee, provided such designee is at a Vice President level or above.

1.42 **"Exercised Disease Field"** has the meaning set forth in the Vaccine Collaboration Agreement.

1.43 **"Exercised Field"** means the Liquidia Respiratory Field if GSK exercises the Liquidia Respiratory Option, and the Inhaled Field if GSK exercises the Inhaled Option.

1.44 **"FD&C Act"** means the U.S. Federal Food, Drug and Cosmetic Act, as amended, and applicable regulations promulgated thereunder by the FDA.

1.45 **"FDA"** means the U.S. Food and Drug Administration or any successor entity.

1.46 **"First Commercial Sale"** means, with respect to a Product, the first sale of such Product to a Third Party by or on behalf of GSK, its Affiliates or sublicensees in a given regulatory jurisdiction following the receipt of Regulatory Approval.

1.47 **"Free Polysaccharide"** means a polysaccharide that is not conjugated to a protective protein Antigen or carrier protein before it is contained in or associated with PRINT Material.

1.48 **"FTE"** means the equivalent of a full-time professional individual's work, at 1,950 hours per year, as adjusted to account for vacation and other permitted time off, for a

twelve (12)-month period. If any part-time personnel of Liquidia performs activities in furtherance of the Inhaled Collaboration under this Agreement, the full time equivalent to be attributed to such work shall reflect appropriate adjustment for such personnel's reduced total work time relative to full time personnel. FTE efforts shall include professional, scientific or technical work and shall not include general corporate and administrative overhead. Liquidia shall track FTEs using its standard practice and normal systems and methodologies.

1.49 "FTE Costs" means, for any period, (a) the percentage of time each FTE is involved in activities in furtherance of the performance of the Inhaled Collaboration in accordance with this Agreement, multiplied by (b) the number of FTEs involved in such activities for such percentage of time, multiplied by (c) an amount equal to the FTE Rate then in effect. For example, if eight (8) Liquidia employees devote fifty percent (50%) of their time to the performance of the Inhaled Collaboration during the first year of this Agreement, then the associated FTE Costs for such employees for such period would be 8x0.5x[***]=$[***]. For the avoidance of doubt, FTE Costs shall not include the costs of personnel serving as JSC, JIRC or JPC members, or Alliance Managers, in their duties as JSC, JIRC or JPC members or Alliance Managers.

1.50 "FTE Rate" means, as of the Effective Date, an annual rate of $[***] per FTE. The FTE Rate may be changed by Liquidia annually, upon notice to GSK and inclusion of the modified FTE Rate in the budget for the applicable Inhaled Plan, commencing on January 1, 2014 to reflect any year-to-year percentage increase or decrease from the Effective Date as reflected in the United States Consumer Price Index – All Urban Consumers, as published by the United States Department of Labor, Bureau of Statistics.

1.51 "General Biological Effects" means biological effect(s) that are not solely applicable within the Inhaled Field or vaccines applications and that result from either (a) the shape and/or uniformity of size of particles contained within PRINT Material or (b) the particle surface characteristics, particle modulus, and/or particle charge, only if and to the extent biological effect(s) are due to the association of such characteristics with the shape and/or uniformity of size of particles contained within PRINT Material, and cannot be achieved with a technology other than PRINT. For clarity, General Biological Effects does not include biological effects attributable to (i) components of PRINT Materials other than the particles themselves, such as excipients and polymers, or (ii) the overall formulation of the composition of particles comprising PRINT Materials.

1.52 "Generic Product" means, with respect to a particular Product in a particular regulatory jurisdiction, any pharmaceutical product that (a) contains substantially the same composition of active ingredients and particles as contained in such Product, in the same pharmaceutical form as the Product; (b) has obtained regulatory approval in such regulatory jurisdiction on expedited or abbreviated basis in a manner that relied on or incorporated data submitted by GSK, its Affiliates or sublicensees; and (c) is sold in such regulatory jurisdiction by a Third Party that is not a sublicensee of GSK or its Affiliates and did not purchase such product in a chain of distribution that included any of GSK, its Affiliates or sublicensees.

1.53 "GLP" means the then-current good laboratory practice standards promulgated or endorsed by the FDA as defined in 21 C.F.R. Part 58, and comparable regulatory standards promulgated by the EMA or other applicable Regulatory Authority, as they may be updated from time to time, including applicable quality guidelines promulgated under the ICH.

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1.54 "GMP" means the then-current good manufacturing practice standards promulgated or endorsed by the FDA as defined in 21 C.F.R. Parts 210 and 211, as may be amended from time to time, or any successor thereto and foreign equivalents thereof.

1.55 "Governmental Authority" means any multi-national, federal, state, local, municipal, provincial or other governmental authority of any nature (including any governmental division, prefecture, subdivision, department, agency, bureau, branch, office, commission, council, court or other tribunal).

1.56 "GSK Bio" means GlaxoSmithKline Biologicals S.A., a company registered in Belgium under number RPM Nivelles — BE — 0440 872 918 and having its principal place of business at 89, Rue de l' Institut, 1330 Rixensart, Belgium.

1.57 "GSK Bio Alliance Manager" has the meaning set forth in Section 2.3.

1.58 "GSK Collaboration Know-How" has the meaning set forth in Section 11.3(b).

1.59 "GSK Indemnitees" has the meaning set forth in Section 13.1.

1.60 "GSK Know-How" means all (a) Know-How that is (i) Controlled by GSK or its Affiliates as of the Effective Date or during the Inhaled Collaboration Term which may include GSK Collaboration Know-How, and (ii) necessary or useful for Liquidia to carry out its obligations under the Inhaled Plan, and (b) PRINT Improvements.

1.61 "GSK Materials" means any and all materials selected by GSK, its Affiliates or sublicenses to research, develop and/or commercialize using or in connection with PRINT or PRINT Material, including compounds, active pharmaceutical ingredients, drug products, devices, biological materials, Antigens, immunostimulants, reagents or the like, and any modifications or derivatives thereof, whether or not such material is proprietary to GSK, its Affiliates or sublicensees.

1.62 "GSK Patents" means any Patent that (a) is Controlled by GSK or its Affiliates as of the Effective Date or during the Inhaled Collaboration Term and (b) would be infringed by Liquidia's performance of its obligations under the Inhaled Plan, absent the license granted hereunder.

1.63 "GSK Respiratory Technology" has the meaning set forth in Section 15.5(a)(i)(A).

1.64 "GSK Technology" means GSK Know-How and GSK Patents.

1.65 **"GSK Withholding Tax Action"** has the meaning set forth in Section 10.11(c).

1.66 **"ICC"** has the meaning set forth in Section 16.4.

1.67 **"ICH"** means International Conference on Harmonisation.

1.68 **"Indemnified Party"** has the meaning set forth in Section 13.3.

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1.69 **"Indemnifying Party"** has the meaning set forth in Section 13.3.

1.70 **"Inhaled Collaboration"** has the meaning set forth in Section 3.1.

1.71 **"Inhaled Collaboration Term"** has the meaning set forth in Section 3.3(a).

1.72 **"Inhaled Field"** means the treatment of any human disease or condition in pulmonary tissues or cells, the brain or any other extra-pulmonary tissues, in each case via the inhaled route topically via the lung or nasal mucosa, but excludes prophylactic or therapeutic Vaccine. For clarity, the Inhaled Field includes the Liquidia Respiratory Field.

1.73 **"Inhaled License"** has the meaning set forth in Section 5.2(b).

1.74 **"Inhaled Option"** has the meaning set forth in Section 4.2(a).

1.75 **"Inhaled Option Notice"** has the meaning set forth in Section 4.2(b).

1.76 **"Inhaled Option Period"** has the meaning set forth in Section 4.2(b).

1.77 **"Inhaled Plan"** has the meaning set forth in Section 3.2.

1.78 **"Inhaled Product"** means (a) any drug product that is regulated under the FD&C Act on a prescription basis (or, with respect to drug products sold in jurisdictions other than the United States, that would be regulated under the FD&C Act on a prescription basis if sold in the United States) or (b) any drug product initially made available on a prescription basis as an Inhaled Product under this Agreement but later made available on a non-prescription or over-the-counter basis, in each case of (a) and (b) that comprises or contains PRINT Material and GSK Material in its final finished form for sale for use in humans in the Inhaled Field. For clarity, Inhaled Product excludes Research Materials, Research Products and any product that is intended for animal health use, diagnostic use or consumer health use.

1.79 **"JIRC Term"** has the meaning set forth in Section 2.2.

1.80 **"Joint Inhaled Collaboration Know-How"** has the meaning set forth in Section 11.4(a).

1.81 **"Joint Inhaled Collaboration Patents"** has the meaning set forth in Section 11.4(c).

1.82 **"Joint Inhaled Research Committee"** or **"JIRC"** has the meaning set forth in Section 2.2.

1.83 **"Joint Patent Committee"** or **"JPC"** has the meaning set forth in Section 2.4.

1.84 **"Joint Steering Committee"** or **"JSC"** means the committee formed by the Parties as described in Section 2.1.

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1.85 **"Joint Vaccine Collaboration Know-How"** has the meaning set forth in the Vaccine Collaboration Agreement.

1.86 **"Joint Vaccine Collaboration Patents"** has the meaning set forth in the Vaccine Collaboration Agreement.

1.87 **"Joint Vaccines Research Committee"** or **"JVRC"** means the research committee established under Section 2.2 of the Vaccines Collaboration Agreement.

1.88 **"JSC Term"** has the meaning set forth in Section 2.1.

1.89 **"Know-How"** means any and all data and test data (including pharmacological, biological, chemical, biochemical, clinical test data and data resulting from non-clinical studies), results, inventions (whether or not patentable), technology, business or financial information or information of any other type, in any tangible or intangible form, including know-how, trade secrets, practices, techniques, methods, processes, developments, specifications, formulations, formulae, materials or compositions of matter of any type or kind (patentable or otherwise), software, algorithms, and expertise.

1.90 **"Laws"** means all laws, statutes, rules, regulations, ordinances and other pronouncements having the effect of law of any federal, national, multinational, state, provincial, county, city or other political subdivision.

1.91 **"Legal Requirement"** has the meaning set forth in Section 14.4(c).

1.92 **"Liquidia Collaboration Know-How"** has the meaning set forth in Section 11.3(a).

1.93 **"Liquidia Know-How"** means all Know-How that is (a) Controlled by Liquidia or its Affiliates as of the Effective Date or at any time during the Term, whether such Know-How arises under the Collaboration Program as Liquidia Collaboration Know-How or arises outside of the Collaboration Program (for example, arising in connection with the work conducted by UNC under the UNC Research Agreement), and (b) necessary or reasonably useful for the making, having made, using, selling, offering for sale and import of the Liquidia Respiratory Product, the Research Products or the Inhaled Products, as applicable. For clarity, Liquidia Know-How excludes Joint Inhaled Collaboration Know-How. The use of "Affiliate" in this definition shall exclude any Third Party that becomes an Affiliate of Liquidia in connection with a Change of Control of Liquidia after the Effective Date.

1.94 **"Liquidia Indemnitees"** has the meaning set forth in Section 13.2.

1.95 **"Liquidia Patents"** means any Patent that (a) is Controlled by Liquidia or its Affiliates as of the Effective Date or at any time during the Term, and (b) would be infringed by the making, having made, using, selling, offering for sale or import of the Liquidia Respiratory Product, Research Products or the Inhaled Products, as applicable, absent the license granted hereunder to GSK upon GSK's exercise of the Liquidia Respiratory Option or Inhaled Option, as applicable. For clarity, Liquidia Patents exclude Joint Inhaled Collaboration Patents, but include

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Patents covering or claiming Liquidia Know-How. The Liquidia Patents existing as of the Effective Date include those set forth in Exhibit A attached hereto. The use of "Affiliate" in this definition shall exclude any Third Party that becomes an Affiliate of Liquidia in connection with a Change of Control of Liquidia after the Effective Date.

1.96 **"Liquidia Respiratory Field"** means the treatment or prevention of pulmonary hypertension.

1.97 **"Liquidia Respiratory License"** has the meaning set forth in Section 5.2(a).

1.98 **"Liquidia Respiratory Option"** has the meaning set forth in Section 4.1(b).

1.99 **"Liquidia Respiratory Product"** means the dry powder inhaled Treprostinil product known as NT-001 or a substitute non-proprietary compound directed to the treatment or prevention of pulmonary hypertension, which product is developed by Liquidia using PRINT. For clarity, any compound substitution shall become fixed as of the date GSK exercises the Liquidia Respiratory Option.

1.100 **"Liquidia Retained Product"** has the meaning set forth in the Vaccine Collaboration Agreement.

1.101 **"Liquidia Technology"** means the Liquidia Know-How and Liquidia Patents. For purposes of clarity, Liquidia Technology includes Know-How and Patents covering or claiming any and all inventions, discoveries and other subject matter conceived or reduced to practice or otherwise discovered by or on behalf of Liquidia in connection with development of the Liquidia Respiratory Product, the Excluded Applications, or any vaccine product in the Retained Disease Field, that are related to PRINT and have broad applicability to other products, but excludes Know-How and Patents covering or claiming any and all inventions, discoveries and other subject matter conceived or reduced to practice or otherwise discovered by or on behalf of Liquidia in connection with development of the Liquidia Respiratory Product, the Excluded Applications, or any vaccine product in the Retained Disease Field, that are specific solely to the Liquidia Respiratory Product, the Excluded Applications, or any vaccine product in the Retained Disease Field, as applicable, that do not have broad applicability to other products, and therefore, are not necessary for the making, having made, using, selling, offering for sale and importing of other products (including Research Products and Inhaled Products).

1.102 **"Losses"** has the meaning set forth in Section 13.1.

1.103 "**Major EU Markets**" means France, Germany, Italy, Spain, and the United Kingdom.

1.104 **"Marketing Authorization Application"** or **"MAA"** means an application to the appropriate Regulatory Authority for approval to market a Product (but excluding pricing approval) in any particular jurisdiction, including an NDA or BLA in the U.S.

1.105 **"Material Receiving Party"** has the meaning set forth in Section 3.5(c)(i).

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1.106 **"Materials"** has the meaning set forth in Section 3.5(c)(i).

1.107 **"NDA"** means a New Drug Application (as more fully described in 21 C.F.R. 314.50 et seq. or its successor regulation) and all amendments and supplements thereto.

1.108 **"Negotiation Period"** has the meaning set forth in Section 4.3.

1.109 "Net Sales" means, with respect to a Product, the sales figure publicly reported by GSK on a calendar quarterly basis as calculated using International Financial Reporting Standards (IFRS) applied in a consistent basis. An example of the calculation method used as of the Effective Date of this Agreement is listed in Schedule 1.109; provided, that such example is provided for illustrative purposes only and may not be the same calculation method used by GSK upon First Commercial Sale of a Product. Notwithstanding the foregoing, amounts received or invoiced by GSK, its Affiliates, or their sublicensees for the sale of such Product among GSK, its Affiliates or their respective sublicensees for resale shall not be included in the computation of Net Sales hereunder. With respect to any sale of any Product in a given country for any substantive consideration other than monetary consideration on arm's length terms (which has the effect of reducing the invoiced amount below what it would have been in the absence of such non-monetary consideration), for the purposes of calculating the Net Sales under this Agreement, such Product shall be deemed to be sold exclusively for money at the average Net Sales price charged to Third Parties for cash sales in such country during the applicable reporting period (or if there were only de minimus cash sales in such country, at the fair market value as determined by comparable markets). Adjustments may be made to the calculation of Net Sales as required by changes in IFRS as necessary in the future, or as appropriate to reflect changes to GSK's accounting rules (e.g. change from IFRS to UK GAAP).

If a Product is sold as part of a Combination (**"Combination"** means a Product formulated in combination with one or more already marketed product(s) derived independently of this Agreement) and such Product and other products contained in the Combination are sold separately, then Net Sales for purposes of determining royalties on the Product in the Combination shall be calculated by multiplying Net Sales by the fraction A/(A+B), where A is the [***] and B is the [***]; provided, that Net Sales for purpose of determining royalties on the Product in the Combination in accordance with this paragraph shall be no less than [***] percent ([***]%) of the Net Sales of the Combination.

If the Product in a Combination is not sold separately or if the average wholesale acquisition cost of the Product in the Combination is not available and the Parties are unable to agree on an alternative arrangement, then Net Sales for purposes of determining royalties on the Product in the Combination shall be determined by multiplying Net Sales of the Combination by a fraction X/Y, wherein X is the number of [***], and Y is the [***]; provided, that Net Sales for purpose of determining royalties on the Product in the Combination in accordance with this paragraph shall be no less than [***]percent ([***]%) of the Net Sales of the Combination. For illustrative purposes with respect to this paragraph, if GSK sells a Combination comprising (a) an already marketed product derived independently of this Agreement containing [***] and (b) a Product containing [***], the Net Sales of the Combination shall be multiplied by [***], provided that the Net Sales attributable to the Product in the Combination shall be no less than [***] percent ([***]%) of the Net Sales of the Combination.

Confidential treatment has been requested with respect to portions of this agreement as indicated by "[***]" and such confidential portions have been deleted and filed separately with the Securities and Exchange Commission pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

1.110 "New Therapeutic Product" means any Inhaled Product or Research Product that is not a Rescue Therapeutic Product.

1.111 "Non-Governmental Organization" means any non-profit entity or voluntary citizens' group which is organized on a local, national or international level, for example see www.ngo.org, including BMGF.

1.112 "Party" or **"Parties"** has the meaning set forth in the preamble.

1.113 "Patents" means (a) pending patent applications, issued patents, utility models and designs; (b) reissues, substitutions, confirmations, registrations, validations, re-examinations, additions, continuations, continued prosecution applications, continuations-in-part, or divisions of or to any of the foregoing; and (c) extensions, renewals or restorations of any of the foregoing by existing or future extension, renewal or restoration mechanisms, including supplementary protection certificates or the equivalent thereof.

1.114 "Phase I Clinical Trial" means a Clinical Trial of a product in human subjects with the endpoint of determining initial tolerance, safety, immunogenicity or pharmacokinetic information in single dose, single ascending dose, multiple dose and/or multiple ascending dose regimens, which is prospectively designed to generate sufficient data (if successful) to commence a Phase II Clinical Study of such product, as further defined in 21 C.F.R. 312.21(a), as amended from time to time, or the corresponding foreign regulations.

1.115 "Phase II Clinical Trial" means a Clinical Trial of a product in human patients or subjects to determine immunogenicity, initial efficacy (if applicable) and dose range and/or regimen finding before commencing a Phase III Clinical Trial, as further defined in 21 C.F.R. 312.21(b), as amended from time to time, or the corresponding foreign regulations.

1.116 "Phase III Clinical Trial" means a pivotal Clinical Trial (whether or not denominated a "Phase III") of a product in human patients or subjects with a defined dose or a set of defined doses designed to ascertain efficacy and safety of such product for the purpose of enabling the preparation and submission of MAA to the competent Regulatory Authorities, as further defined in 21 C.F.R. 312.21(c), as amended from time to time, or the corresponding foreign regulations.

1.117 "PRINT" means Liquidia's proprietary micro or nano-fabrication process for producing particles and particles on a film of a predetermined size, shape and composition (generally known as PRINT® (Particle Replication In Nonwetting Template)), including all processes, systems and materials (including using molds but excluding making molds) for producing such particles and all Liquidia proprietary substances used in making any such particles. For the avoidance of doubt, PRINT does not include the particles or the particle formulations or PRINT Material generated using PRINT, or the PRINT Tooling.

1.118 "PRINT DMF" has the meaning set forth in Section 7.1.

1.119 "PRINT Improvements" means (a) any improvements or modifications to General Biological Effects; and/or (b) any Know-How to the extent related to PRINT or PRINT

Tooling made or generated using PRINT or PRINT Tooling in connection with the manufacturing of Research Materials, Liquidia Respiratory Product, Research Products or Inhaled Products, in each case of (a) and (b) made by GSK, its Affiliates or sublicensees (for clarity, including Third Party manufacturer) under this Agreement but outside the Inhaled Plan, as well as any Patents claiming or covering any of the foregoing, in all cases, Controlled by GSK, its Affiliates, sublicensees or Third Party manufacturers.

1.120 "PRINT Material" means a particle or a group of particles that is developed, manufactured or otherwise produced using PRINT and PRINT Tooling or otherwise developed, manufactured or produced using any Liquidia Technology whether such particle or group of particles is developed, manufactured or produced by Liquidia or GSK, or their Affiliates or sublicensees. For clarity, "particle(s)" may refer to the composition of the particles, including excipients that prevent degradation or provide stabilization to the particle(s), but specifically excludes and is not meant to encompass, any Research Products, Products or Research Materials.

1.121 "PRINT Tooling" means the Liquidia proprietary information, trade secrets, materials and substrates for fabricating the patterned drums (including the patterned drums themselves) and molds (excluding the molds themselves) that enable PRINT. For the avoidance of doubt, PRINT Tooling does not include the particles or any particle formulation, PRINT Material or PRINT.

1.122 "Product" means either an Inhaled Product(s) or the Liquidia Respiratory Product, as the context requires.

1.123 "Product Information" has the meaning set forth in Section 12.2(j).

1.124 "Product Infringement" has the meaning set forth in Section 11.6(a).

1.125 "Product Marks" has the meaning set forth in Section 11.9.

1.126 "Public Statement" has the meaning set forth in Section 14.4(c).

1.127 "Purpose" has the meaning set forth in Section 3.5(c)(i).

1.128 "Regulatory Approval" means all approvals (including MAA approval and supplements and amendments thereto and any required pricing approval), licenses, registrations or authorizations of any Governmental Authority necessary for the development or commercialization of the Liquidia Respiratory Product, a Research Product or Inhaled Product, including clinical testing, manufacture, distribution, use or sale of such Liquidia Respiratory Product, Research Product or Inhaled Product in a given regulatory jurisdiction.

1.129 "Regulatory Authority" means, in a particular country or jurisdiction, any applicable Governmental Authority involved in granting Regulatory Approval in such country or jurisdiction.

1.130 "Regulatory Exclusivity" means any exclusive marketing rights or data exclusivity rights conferred by any Governmental Authority with respect to a Product in a

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country or jurisdiction, other than a Patent right, including orphan drug exclusivity, pediatric exclusivity, rights conferred in the U.S. under the Hatch-Waxman Act or the Biologics Price Competition and Innovation Act of 2009, or in the EU under Directive 2001/83/EC, or rights similar thereto in other countries or regulatory jurisdictions.

1.131 "Regulatory Materials" means regulatory applications, submissions, notifications, communications, correspondence, registrations, MAAs, Regulatory Approvals and/or other filings made to, received from or otherwise conducted with a Regulatory Authority in connection with the development or commercialization of a Research Product or Product in a particular country or jurisdiction.

1.132 "Remedial Action" has the meaning set forth in Section 7.5.

1.133 "Rescue Therapeutic Product" means any Inhaled Product or Research Product that contains GSK Material for which GSK had previously terminated development activities due to material safety, efficacy or formulation issues and for which development activities were reinitiated following the application of Liquidia Technology and/or Collaboration Know-How if PRINT or PRINT Materials are solely capable of solving such material safety, efficacy or formulation issues. Evidence of GSK's decision to terminate development as described above with respect to clinical stage assets will be as set forth in the minutes of the applicable GSK governance committee responsible for making the decision, and with respect to pre-clinical assets will be as set forth in GSK's iPLAN system.

1.134 "Research Materials" means any product that comprises or contains PRINT Material and GSK Material for use in the Inhaled Plan.

1.135 "Research Product" means any (a) product that is or is planned to be regulated under the FD&C Act on a prescription basis (or, with respect to drug products sold in jurisdictions other than the United States, that would be regulated under the FD&C Act on a prescription basis if sold in the United States) or (b) any drug product initially made available on a prescription basis as an Inhaled Product under this Agreement but later made available on a non-prescription or over-the-counter basis, in either case, that comprises or contains PRINT Material and GSK Material for use in Clinical Trials and other development activities in the Inhaled Field under this Agreement. For clarity, Research Product excludes Research Materials, Inhaled Products and any product that is intended for animal health use, diagnostic use or consumer health use.

1.136 "Respiratory Option Notice" has the meaning set forth in Section 4.1(c).

1.137 **"Retained Field"** has the meaning set forth in Section 5.9.

1.138 **"Retained Disease Field"** has the meaning set forth in the Vaccine Collaboration Agreement.

1.139 **"Reversion Royalty"** has the meaning set forth in Section 15.5(a)(i)(B).

1.140 **"ROFN Notice"** has the meaning set forth in Section 4.3.

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1.141 **"Royalty Purchaser"** has the meaning set forth in Section 17.5(c).

1.142 **"Royalty Term"** has the meaning set forth in Section 10.5(b).

1.143 **"Term"** has the meaning set forth in Section 15.1.

1.144 **"Territory"** means the whole world.

1.145 **"Third Party"** means any entity other than Liquidia or GSK or their respective Affiliates.

1.146 **"Third Party Agreements"** means the agreements listed on Exhibit B.

1.147 **"Transfer Record"** has the meaning set forth in Section 3.5(c)(i).

1.148 **"Transferring Party"** has the meaning set forth in Section 3.5(c)(i).

1.149 **"UNC License Agreement"** means the Amended and Restated License Agreement between Liquidia and The University of North Carolina at Chapel Hill (**"UNC"**), dated December 15, 2008, as amended.

1.150 **"UNC Material Transfer Agreement"** means the Material Transfer Agreement between Liquidia and UNC, dated August 16, 2007, as amended.

1.151 **"UNC Research Agreement"** means the Supported Research Agreement between Liquidia and UNC, dated September 1, 2005, as amended.

1.152 **"University Inventions"** has the meaning set forth in Section 8(a) of the UNC Research Agreement.

1.153 **"U.S."** means the United States of America, including all possessions and territories thereof.

1.154 "**Vaccine**" means a biological product containing an Antigen(s) that induces an Antigen-specific immune response intended to prevent or treat the target disease or condition after administration to a human through any route of delivery, including intramuscular, intradermal, sublingual, intranasal or oral delivery, but excluding delivery to the lung.

1.155 **"Vaccine Collaboration"** has the meaning set forth in the Vaccine Collaboration and Option Agreement, dated June 15, 2012, between Liquidia and GSK Bio (the **"Vaccine Collaboration Agreement"**).

1.156 **"Vaccine Collaboration Term"** has the meaning set forth in the Vaccine Collaboration Agreement.

1.157 **"Vaccine Option"** has the meaning set forth in the Vaccine Collaboration Agreement.

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1.158 **"Vaccine Option Period"** has the meaning set forth in the Vaccine Collaboration Agreement.

1.159 **"Vaccine Plan"** has the meaning set forth in the Vaccine Collaboration Agreement.

1.160 **"Valid Claim"** means a claim of any issued and unexpired Patent included within Liquidia Patents, Joint Inhaled Collaboration Patents or Joint Vaccine Collaboration Patents, which claim has not been revoked, held invalid or unenforceable by a patent office, court or other governmental agency of competent jurisdiction in a final and non-appealable judgment (or judgment from which no appeal was taken within the allowable time period) and which claim has not been disclaimed, denied or admitted to be invalid or unenforceable through reissue, re-examination or disclaimer or otherwise.

1.161 **Interpretation.** In this Agreement, unless otherwise specified:

(a) "includes" and "including" shall mean respectively includes without limitation and including without limitation;

(b) words denoting the singular shall include the plural and vice versa and words denoting any gender shall include all genders;

(c) words such as "herein", "hereof", and "hereunder" refer to this Agreement as a whole and not merely to the particular provision in which such words appear; and

(d) the Exhibits and other attachments form part of the operative provision of this Agreement and references to this Agreement shall include references to the Exhibits and attachments.

ARTICLE 2
GOVERNANCE

2.1 Joint Steering Committee. Within fifteen (15) days after the Effective Date, the Parties shall, together with GSK Bio (collectively referred to as the **"Committee Parties"**), establish a joint steering committee (the "**Joint Steering Committee**" or "**JSC**") to oversee the Collaboration Program. Each Committee Party agrees to keep the JSC informed of its progress and activities under the Collaboration Program as described in this Section 2.1 and Section 2.1 of the Vaccine Collaboration Agreement. The JSC shall cease to meet and its role under this Agreement shall end upon the later to occur of either the expiration of the Inhaled Collaboration Term or the Vaccine Collaboration Term (the **"JSC Term"**).

(a) Membership. The JSC shall consist of two (2) representatives of each of GSK and GSK Bio, and four (4) representatives of Liquidia, in each case that have sufficient seniority to make decisions arising within the scope of the JSC's responsibilities. Each Committee Party may replace any or all of its representatives on the JSC at any time upon written notice to the other Committee Parties in accordance with Section 17.3. Each Committee Party may, subject to the other Committee Parties' prior approval, invite non-member

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representatives of such Committee Party to attend meetings of the JSC as non-voting participants, subject to the confidentiality obligations of Article 14. The Committee Parties shall designate a chairperson (each, a **"Chairperson"**) to oversee the operation of the JSC, each such Chairperson to serve a twelve (12) month term. The right to name the Chairperson shall alternate between the Committee Parties with GSK Bio designating the first such Chairperson. Chairpersons shall have no additional powers or rights beyond those held by other JSC members.

(b) Meetings. The first scheduled meeting of the JSC shall be held no later than forty-five (45) days after the Effective Date. Thereafter, prior to the expiration of the JSC Term, the JSC shall meet at least once each calendar quarter, and more or less frequently as the Committee Parties mutually deem appropriate, on such dates and at such places and times as provided herein or as the Committee Parties shall agree. Any Committee Party may also call a special meeting of the JSC by at least ten (10) Business Days prior written notice to the other Committee Parties in the event such Committee Party reasonably believes that a significant matter must be addressed prior to the next regularly scheduled meeting, and such Committee Party shall provide the other Committee Parties with materials reasonably adequate to enable an informed decision on such matter. Meetings of the JSC that are held in person shall alternate between the offices of the Committee Parties, or such other location as the Committee Parties may agree. The members of the JSC also may meet or be polled or consulted from time to time by means of telecommunications, video conferences, electronic mail or correspondence, as deemed necessary or appropriate. Prior to any JSC meeting, the Chairperson shall prepare and circulate an agenda for such meeting; provided, however, that any Committee Party may propose additional topics to be included on such agenda, either prior to or in the course of such meeting. Meetings of the JSC shall be effective only if at least two (2) representatives of each Committee Party are present or participating in such meeting. Each Committee Party will bear all expenses it incurs in regard to participating in all meetings of the JSC, including all travel and living expenses.

(c) Minutes. On an alternating basis among the Committee Parties, during the same 12 month term as each Chairperson, an Alliance Manager from a Committee Party other than the Committee Party of the Chairperson shall be responsible for preparing and circulating minutes of each meeting of the JSC, setting forth, *inter alia*, an overview of the discussions at the meeting and a list of any actions, decisions or determinations approved by the JSC and a list of any issues to be resolved by the Executive Officers pursuant to Section 2.1(e)(i). Such minutes shall be effective only after approved by all Committee Parties in writing. With the sole exception of specific items of the meeting minutes to which the members cannot agree and that are escalated to the Executive Officers as provided in Section 2.1(e)(i), definitive minutes of all JSC meetings shall be finalized no later than thirty (30) days after the meeting to which the minutes pertain.

(d) Responsibilities. The JSC shall serve as a forum to share Know-How and learnings from each of the Inhaled Collaboration and Vaccines Collaboration. Specifically, the JSC shall:

(i) provide oversight over the Collaboration Program and facilitate communication and discussion between the Committee Parties with respect to the Collaboration Program;

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(ii) ensure that each of the JVRC and JIRC be kept informed of data and Know-How generated under each of the Inhaled Plan and Vaccines Plan, respectively, that may have broad applicability or usefulness to both the Vaccines Plan and Inhaled Plan;

(iii) review and approve amendments to the Inhaled Plan and Vaccines Plan and all associated budgets;

(iv) discuss and resolve any disputes relating to the Collaboration Program, including any disputed matter referred from the JVRC or JIRC;

(v) from time to time but no more often than quarterly during the JSC Term, in consultation with the JIRC, JVRC and JPC, discuss research that has been conducted by UNC and Consultant under the UNC Research Agreement, the UNC Material Transfer Agreement and the Consulting Agreement in the Liquidia Respiratory Field, the Inhaled Field or Co-Delivery Vaccine Field, as well as outside the Liquidia Respiratory Field, the Inhaled Field or Co-Delivery Vaccine Field that is expected to relate to General Biological Effects, and review results, University Inventions and other inventions generated by all such research. Notwithstanding the foregoing, discussion of research shall occur more often than quarterly as required for GSK to review such research reasonably prior to publication thereof;

(vi) from time to time but no more often than quarterly during the JSC Term, in consultation with the JIRC, JVRC and JPC, review and approve any research to be conducted by Third Parties under agreements between Third Parties and UNC (which agreements may or may not include Liquidia as a party) using PRINT or PRINT Materials supplied by Liquidia in the Liquidia Respiratory Field, the Inhaled Field or Co-Delivery Vaccine Field, including the intellectual property provisions of such agreements, in accordance with Section 5.7;

(vii) from time to time but no more often than quarterly during the JSC Term, in consultation with the JIRC, JVRC and JPC, discuss research that has been conducted by Third Parties under agreements between Third Parties and UNC (which agreements may or may not include Liquidia as a party) using PRINT or PRINT Materials supplied by Liquidia outside the Liquidia Respiratory Field, the Inhaled Field or Co-Delivery Vaccine Field that is expected to relate to General Biological Effects, and review results and inventions generated by all such research, to the extent Liquidia becomes aware of such research results. Notwithstanding the foregoing, discussion of research shall occur more often than quarterly as required for GSK to review such research reasonably prior to publication thereof;

(viii) review and discuss manufacturing and supply requirements and obligations related to PRINT Materials, Research Materials and Research Products. Such discussion shall include matters related to any anticipated delay in manufacturing and supply of PRINT Materials and Research Materials, and the impact of such delay on the conduct of the Inhaled Plan or Vaccine Plan. The Parties shall also discuss whether such delay shall be addressed by an extension of the Inhaled Collaboration Term or Vaccine Collaboration Term or a manufacturing technology transfer as described in Section 5.2(c)(i); provided, that the technology transfer described in Section 5.2(c)(i) shall occur only if the Parties agree that such

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transfer would be more likely to decrease the delay of conducting the Inhaled Plan or Vaccine Plan than allowing Liquidia to cure such delay in supply;

(ix) track expenses against agreed budgets as set forth in the Vaccine Plan and Inhaled Plan; and

(x) perform such other functions as agreed by the Parties in writing.

(e) Decision Making; Governance Principles.

(i) All decisions of the JSC shall be made by unanimous vote, with Liquidia's representatives collectively having one (1) vote and representatives of both GSK and GSK Bio collectively having one (1) vote. The JSC shall strive to seek consensus in its actions and decision making process. If after reasonable discussion and good faith consideration of each Party's view on a particular matter before the JSC, the representatives on the JSC cannot reach a unanimous decision on such matter within thirty (30) calendar days after such matter was raised to the JSC for resolution, then such disagreement shall be referred to the Executive Officers for resolution. If the Executive Officers cannot resolve such matter within thirty (30) calendar days after such matter has been referred to them, then (A) Liquidia's Executive Officer shall have the right to decide all matters relating to PRINT Tooling and the operational aspects of PRINT under this Agreement and the Development Supply Agreement; provided, that Liquidia's Executive Officer shall not have the right to decide matters related to GSK's choice of composition, size, and/or shape of the PRINT Material, quality issues of the PRINT Material, Research Materials or Research Products, or the quality or timing of delivery of such PRINT Material, Research Materials or Research Products (including a decrease in Liquidia's supply obligations), or matters related to the required manufacturing and scale-up deliverables set forth in the Inhaled Plan or Vaccines Plan, and (B) GSK's Executive Officer and/or GSK Bio's Executive Officer, as applicable to the matter under dispute, shall have the right to decide all other matters, in each case consistent with the terms of this Agreement and in good faith. Notwithstanding the foregoing, (1) unless otherwise agreed by the Parties, disputes relating to non-disclosure, non-use and maintenance of Confidential Information and determinations of material breach or interpretation of this Agreement shall not be subject to GSK and/or GSK Bio final decision-making authority and may be escalated to the dispute resolution process set forth in Article 16 and (2) disputes involving intellectual property issues within the purview of the JPC shall be resolved as provided in Section 2.4.

(ii) Each Party shall at all times exercise its final decision-making authority using reasonable scientific and business judgment, in compliance with applicable Laws, and in accordance with its obligations to use Commercially Reasonable Efforts. To the extent that GSK or GSK Bio, as the case may be, in exercising its final decision-making authority in accordance with the foregoing principles, determines that amendments are required to be made to the Inhaled Plan and/or Vaccine Plan, and such amendments would materially increase the scope of activities to be performed by Liquidia, then the Parties shall discuss such additional activities in good faith, and Liquidia will use Commercially Reasonable Efforts to accommodate such additional activities. If additional material financial or other resources are required to fulfil the increased scope of activities requested by GSK or GSK Bio, including funding for additional scale up or capital expenditures for Liquidia's manufacturing facilities,

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then the Parties shall discuss the terms of sharing such additional financial resources, including the ability to credit GSK's additional scale up or capital expenditure costs against future manufacturing costs. If the Parties cannot agree on sharing of costs, then Liquidia shall not be obligated to perform the increased scope of activities requested by GSK or GSK Bio and GSK or GSK Bio shall not be obligated to provide additional funding for such increased scope of activities. For the avoidance of doubt, nothing herein is intended to prevent the JSC or GSK or GSK Bio (to the extent GSK or GSK Bio has final decision-making authority hereunder), as applicable, from (A) making non-material amendments to the Inhaled Plan or Vaccines Plan that do not impose on

Liquidia additional material obligations, including financial obligations, or (B) making material amendments that are not related to the supply of PRINT Material, do not require a technology transfer of PRINT or PRINT Tooling to GSK or a Third Party manufacturer, and for which GSK or GSK Bio assumes responsibility and cost.

2.2 Joint Inhaled Research Committee. Within fifteen (15) days after the Effective Date, the Parties shall establish a joint research committee (the "**Joint Inhaled Research Committee**" or "**JIRC**") to oversee the day-to-day implementation and operational aspects of the Inhaled Collaboration. Each Party agrees to keep the JIRC informed of its progress and activities under the Inhaled Collaboration. The JIRC shall cease to meet and its role under this Agreement shall end upon the expiration of the Inhaled Collaboration Term (the **"JIRC Term"**).

(a) Membership. The JIRC shall consist of three (3) Liquidia personnel and three (3) GSK therapeutic area experts or platform technology experts of sufficient seniority to make decisions arising within the scope of the JIRC's responsibilities. Each Party may replace any or all of its representatives on the JIRC at any time upon written notice to the other Party in accordance with Section 17.3. Each Party may, subject to the other Party's prior approval, invite non-member representatives of such Party to attend meetings of the JIRC as non-voting participants, subject to the confidentiality obligations of Article 14.

(b) Meetings. The first scheduled meeting of the JIRC shall be held no later than forty-five (45) days after the Effective Date. Thereafter, prior to the expiration of the JIRC Term, the JIRC shall meet at least once per calendar month, and more or less frequently as the Parties mutually deem appropriate, on such dates and at such places and times as provided herein or as the Parties shall agree. Either Party may also call a special meeting of the JIRC by at least ten (10) Business Days prior written notice to the other Party in the event such Party reasonably believes that a significant matter must be addressed prior to the next regularly scheduled meeting, and such Party shall provide the other Party with materials reasonably adequate to enable an informed decision on such matter. Meetings of the JIRC that are held in person shall alternate between the offices of the Parties, or such other location as the Parties may agree. The members of the JIRC also may meet or be polled or consulted from time to time by means of telecommunications, video conferences, electronic mail or correspondence, as deemed necessary or appropriate. Meetings of the JIRC shall be effective only if at least two (2) representatives of each Party are present or participating in such meeting. Each Party will bear all expenses it incurs in regard to participating in all meetings of the JIRC, including all travel and living expenses.

(c) Minutes. The JIRC members shall designate a secretary at each meeting (which may be the Alliance Manager if the Alliance Manager attends such meeting) who shall be

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responsible for keeping minutes that record all decisions and all actions recommended or taken in reasonable detail. Such minutes shall be effective only after approved by the Parties in writing. With the sole exception of specific items of the meeting minutes to which the members cannot agree and that are escalated to the JSC as provided in Section 2.2(e), definitive minutes of all JIRC meetings shall be finalized no later than fifteen (15) days after the meeting to which the minutes pertain.

(d) Responsibilities. The JIRC shall:

(i) oversee the implementation of the Inhaled Plan in accordance with the applicable budget;

(ii) review and discuss Know-How generated by the Parties in the course of performing the Inhaled Plan, and report all Know-How, data and results to the JSC on a quarterly basis (or more frequently as requested by the JSC);

(iii) consult with the JSC and JPC on the matters set forth in Sections 2.1(d)(v), (vi) and (vii); and

(iv) prepare proposed amendments to the Inhaled Plan and budget and submit such amendments to the JSC for review and approval.

(e) Decision Making. All decisions of the JIRC shall be made by unanimous vote, with each Party's representatives collectively having one (1) vote. The JIRC shall strive to seek consensus in its actions and decision making process. If after reasonable discussion and good faith consideration of each Party's view on a particular matter before the JIRC, the representatives on the JIRC cannot reach a unanimous decision on such matter within ten (10) calendar days after such matter was raised for resolution by the JIRC, then either Party may, by written notice to the other, have such issue submitted to the JSC for resolution in accordance with Section 2.1.

2.3 Alliance Managers. Within fifteen (15) days after the Effective Date, each Party shall appoint and notify the other Party of the identity of a representative having the appropriate qualifications, including a general understanding of pharmaceutical research and development issues, to act as its alliance manager under this Agreement (the "**Alliance Manager**"). The Alliance Managers shall serve as the primary contact points between the Parties and be primarily responsible for facilitating the flow of information and otherwise promoting communication, coordination and collaboration between the Parties. Each Party may replace its Alliance Manager at any time upon written notice to the other Party. The Alliance Managers shall attend each meeting of the JSC as non-voting members. In addition to the foregoing, the Parties acknowledge that GSK Bio shall appoint an alliance manager under the Vaccine Collaboration Agreement (the **"GSK Bio Alliance Manager"**); provided, that the Alliance Manager appointed by GSK hereunder shall serve as the primary point of contact for Liquidia's Alliance Manager across both this Agreement and the Vaccine Collaboration Agreement; and provided, further that the GSK Bio Alliance Manager shall attend each meeting of the JSC as a non-voting member, which attendance may be in person, or via teleconference or videoconference as appropriate and shall be responsible for facilitating any in person meetings of the JSC at the GSK Bio facilities.

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2.4 Joint Patent Committee. Within fifteen (15) days after the Effective Date, the Committee Parties shall establish a joint patent committee (the "**Joint Patent Committee**" or "**JPC**"). Each Committee Party shall designate one representative to serve on the JPC. The JPC shall be responsible for discussing material Patent issues and to allow the Committee Parties to provide input to each other regarding the strategy for prosecution, maintenance, enforcement and defense of Joint Inhaled Collaboration Know-How, Joint Inhaled Collaboration Patents, Joint Vaccine Collaboration Know-How and Joint Vaccine Collaboration Patents and Liquidia Technology, including with respect to Liquidia Patents licensed to Liquidia under the UNC License Agreement as further described in Section 11.7. The JPC shall be responsible for working together to achieve a robust Patent portfolio taking into consideration the Liquidia Patents, Joint Inhaled Collaboration Patents and Joint Vaccine Collaboration Patents. In addition, the JPC shall be responsible for consulting with the JIRC, JVRC and JSC on the matters set forth in Sections 2.1(d)(v), (vi) and (vii), and determining whether any Joint Inhaled Collaboration Know-How or Joint Vaccine Collaboration Know-How is independently related to General Biological Effects and has broad applicability to therapeutic uses outside of any vaccines applications and/or the Inhaled Field. Decisions of the JPC shall be made by consensus. In the event of an unresolved dispute at the JPC, after escalation to senior patent counsels of the Committee Parties, Liquidia shall have final decision-making authority over issues related to the prosecution of Liquidia Technology, and GSK and GSK Bio collectively would have final decision-making authority over all issues related to the prosecution of the Joint Inhaled Collaboration Patents and Joint Vaccine Collaboration Patents; provided that no Committee Party shall have the right to make the final decision with respect to determining whether any Joint Inhaled Collaboration Know-How or Joint Vaccine Collaboration Know-How is independently related to General Biological Effects and has broad applicability to therapeutic uses outside of any vaccines applications and the Inhaled Field (such dispute shall be resolved pursuant to Article 16).

2.5 Advisory Council. Upon expiration of the JSC Term and exercise by GSK of the Inhaled Option, the Committee Parties shall establish an advisory council (the **"Advisory Council"**) whose primary function shall be to continue to meet as reasonably required by GSK, but not more frequently than quarterly or as otherwise agreed by the Parties, to discuss issues related to the ongoing development of Research Products by GSK and GSK Bio (in the event the Vaccines Option has been exercised in accordance with the terms of the Vaccine Collaboration Agreement), as well as manufacture of PRINT Materials and Research Products under the Development Supply Agreement by Liquidia, if applicable. For the avoidance of doubt, the Advisory Council is intended to facilitate an ongoing exchange of scientific information and data between the Parties for the benefit of and to inform future plans for, GSK's and GSK Bio's development of Research Products under this Agreement and the Vaccine Collaboration Agreement, and is not intended to serve as a decision-making committee. Further, the Development Supply Agreement shall provide for additional committees as necessary or appropriate to ensure Liquidia's cooperation with GSK with respect to any applicable assessments conducted by GSK of Liquidia or its subcontractors' manufacturing facilities and GSK's control over the applicable supply chains for the Research Products.

2.6 Limitation on Committee Power. Each of the JSC, JIRC and JPC shall only have the powers expressly assigned to it in this Article 2, in Article 2 of the Vaccine

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Collaboration Agreement and elsewhere in this Agreement and shall not have the authority to: (a) modify or amend the terms and conditions of this Agreement; (b) waive either Party's compliance with the terms and conditions of under this Agreement; or (c) determine any such issue in a manner that would conflict with the terms and conditions of this Agreement.

ARTICLE 3
INHALED COLLABORATION PROGRAM

3.1 General. Subject to the terms and conditions of this Agreement, the Parties desire to establish an exclusive collaboration that is focused on defined studies designed to explore the potential application of PRINT and GSK Materials selected by GSK in its sole discretion, in the Inhaled Field (the "**Inhaled Collaboration**").

3.2 Inhaled Plan. The Parties shall conduct the Inhaled Collaboration pursuant to a work plan (the "**Inhaled Plan**"), that sets forth specific activities to be pursued by each Party, including reasonably detailed timelines and budgets associated with such activities. Under the Inhaled Plan, Liquidia would be primarily responsible for generating PRINT Materials, generating Research Materials using PRINT Materials and GSK Materials, and scaling up its manufacturing capabilities, and GSK would be primarily responsible for *in vitro* and *in vivo* evaluation of the PRINT Materials and Research Materials in assays and preclinical models. As of the Effective Date, the Parties have agreed upon the initial Inhaled Plan and associated budget which is attached to this Agreement as Exhibit C. From time to time (at least on an annual basis), the JIRC shall update and prepare amendments to the then-current Inhaled Plan and associated budget and shall submit such amendments and budget to the JSC for review and approval. Once approved by the JSC, such revised Inhaled Plan and budget shall replace the prior applicable Inhaled Plan and budget. If the terms of an Inhaled Plan contradict, or create inconsistencies or ambiguities with, the terms of this Agreement, then the terms of this Agreement shall govern and control.

3.3 Inhaled Collaboration Term.

(a) Subject to the extensions provided in Sections 3.3(b) and (c), the term of the Inhaled Collaboration (the "**Inhaled Collaboration Term**") shall commence on the Effective Date and expire on the third (3rd) anniversary thereof.

(b) If delivery of PRINT Materials or Research Materials for the conduct of the Inhaled Plan as specified in the initial Inhaled Plan attached as Exhibit C does not occur within the first six (6) months after the Effective Date, and provided that Liquidia timely receives the necessary GSK Materials from GSK to make the Research Materials, then the Inhaled Collaboration Term shall be extended by the amount of time delivery is delayed past such six (6) month period.

(c) Subject to Section 3.3(b), the Inhaled Collaboration Term shall be automatically extended if (i) a delay in manufacturing and supply of PRINT Materials and Research Materials by Liquidia would have an adverse impact on the conduct of the Inhaled Collaboration, and (ii) the Parties mutually agree at the JSC that such delay is not likely to be remedied more quickly by a manufacturing technology transfer to a Third Party as described in

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Section 5.2(c)(i). If the foregoing conditions are met, then the Inhaled Collaboration Term shall be extended by the amount of time delivery of PRINT Materials and Research Materials is delayed. For the avoidance of doubt, such delay shall not cause GSK to incur any additional FTE Costs or any other Collaboration Costs.

3.4 Collaboration Costs. GSK shall be responsible for Liquidia's FTE Costs, non-standard costs for lab supplies and manufacturing costs of PRINT Materials and Research Materials incurred solely in connection with the conduct of the Inhaled Plan (and not for activities outside of the conduct of the Inhaled Plan or in furtherance of Liquidia's collaborations with Third Parties) in accordance with the applicable budget (the **"Collaboration Costs"**). For clarity, manufacturing costs included in the Collaboration Costs shall not exceed [***] Dollars ($[***]) per single shift day for standard costs and shall not include any costs associated with capital expenditures for Liquidia's manufacturing facilities unless otherwise agreed by the Parties in accordance with Section 2.1(e)(ii). Notwithstanding anything to the contrary in this Agreement (including the Inhaled Plan and any revisions thereto), GSK shall fund no less than three (3) Liquidia FTEs, but no more than four (4) Liquidia FTEs to work on the Inhaled Collaboration per year. If the activities to be conducted under the Inhaled Plan require additional FTE support, then the JSC shall meet to discuss how to staff such additional activities, which may include contribution of GSK FTEs, at GSK's cost, to perform activities assigned to Liquidia. GSK shall reimburse Liquidia for the Collaboration Costs as set forth in Section 10.2. For the avoidance of doubt, GSK shall be responsible for all costs and expenses incurred by GSK to conduct the Inhaled Collaboration.

3.5 Conduct of Collaboration.

(a) Compliance with Laws; Animal Welfare. Each Party shall use Commercially Reasonable Efforts to carry out the activities assigned to it under the Inhaled Plan, and shall conduct such activities in good scientific manner and in compliance in all material respects with the principles set forth in the attached **Schedule 3.5** (to the extent such principles are applicable to the activities being conducted by that Party) and in compliance with all applicable Laws, including applicable national and international guidelines such as ICH and GLP. In addition to the foregoing, each Party shall at all times comply and shall ensure compliance by any of its subcontractors with the most current best practices for pharmaceutical companies for the proper care, handling and use of animals in pharmaceutical research and development activities, and with the "3R Principles" (reducing the number of animals used, replacing animals with non-animal methods whenever possible and refining the research techniques used), subject to the other Party's reasonable right of inspection, and will promptly and in good faith undertake reasonable corrective steps and measures to remedy the situation to the extent that any significant deficiencies are identified as a result of such inspection.

(b) Data Integrity. Each of the Parties acknowledges the importance of ensuring that the activities conducted under the Inhaled Plan are undertaken in accordance with the following good data management practices, and shall use Commercially Reasonable Efforts to ensure the following:

(i) data are being generated using sound scientific techniques and processes;

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(ii) data are being accurately and reasonably contemporaneously recorded in accordance with good scientific practices by personnel conducting research or development hereunder;

(iii) data are being analyzed appropriately without bias in accordance with good scientific practices; and

(iv) data and results are being stored securely and can be easily retrieved.

(c) Material Transfer.

(i) Other than as may be set forth in the Development Supply Agreement (as defined in Section 9.1), in order to facilitate activities of the Parties under the Inhaled Plan, either Party (referred to in this Section 3.5(c) as the **"Transferring Party"**) may provide to the other Party (referred to in this Section 3.5(c) as the **"Material Receiving Party"**) certain materials, PRINT Materials, GSK Materials, Research Materials or Research Products Controlled by the Transferring Party (such materials provided hereunder are referred to, collectively, as "**Materials**") for use by the Material Receiving Party in furtherance of its rights and the conduct of its obligations under the Inhaled Plan and, in the event GSK exercises either or both of the Liquidia Respiratory Option or Inhaled Option, in furtherance of its rights under the Liquidia Respiratory License or Inhaled License, as applicable (the **"Purpose"**). All transfers of such Materials by the Transferring Party to the Material Receiving Party shall be documented in writing (the **"Transfer Record"**) that sets forth the type and name of the Material transferred, the amount of the Material transferred, the date of the transfer of such Material and the Purpose.

(ii) Except as otherwise provided under this Agreement, all such Materials delivered by the Transferring Party to the Material Receiving Party shall remain the sole property of the Transferring Party, shall only be used by the Material Receiving Party in furtherance of the Purpose, and shall be returned to the Transferring Party upon the termination of this Agreement or upon the discontinuation of the use of such Materials (whichever occurs first). The Material Receiving Party shall not cause the Materials to be used by or delivered to or for the benefit of any Third Party without the prior written consent of the Transferring Party.

(iii) At the time the Transferring Party provides Materials to the Material Receiving Party as provided herein and to the extent not separately licensed under this Agreement, the Transferring Party hereby grants to the other Party a non-exclusive license under the Patents and Know-How Controlled by it to use such Materials solely for the Purpose.

(iv) The Parties agree that the exchanged Materials: (A) shall be used in compliance with applicable Laws; (B) shall not be used in animals intended to be kept as domestic pets; (C) shall not be transferred to a Third Party except if this is provided for and is done in accordance with this Agreement; and (D) shall not be reverse engineered or chemically analyzed, except if this is provided for in the applicable Inhaled Plan.

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(v) THE MATERIALS SUPPLIED BY THE TRANSFERRING PARTY UNDER THIS SECTION 3.5(c) ARE SUPPLIED "AS IS" AND NOT FOR USE IN HUMANS EXCEPT AS EXPRESSLY AGREED BY THE PARTIES IN WRITING, AND THE TRANSFERRING PARTY MAKES NO REPRESENTATIONS AND EXTENDS NO WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR THAT THE USE OF THE MATERIALS DOES NOT INFRINGE ANY PATENT, COPYRIGHT, TRADEMARK, OR OTHER PROPRIETARY RIGHTS OF A THIRD PARTY.

(vi) The Material Receiving Party assumes all liability for damages that may arise from its use, storage or disposal of the Materials. The Transferring Party shall not be liable to the Material Receiving Party for any loss, claim or demand made by the Material Receiving Party, or made against the Material Receiving Party by any Third Party, due to or arising from the use of the Materials, except to the extent such loss, claim or demand is caused by the gross negligence or willful misconduct of the Transferring Party.

3.6 Records and Reports. Until expiration of the JIRC Term, each Party shall provide written progress reports on the status of its activities under the Inhaled Plan, including detailed reports of data and Know-How arising from such activities, at least five (5) Business Days in advance of each JIRC meeting.

3.7 Subcontractors. Each Party shall have the right to engage subcontractors for the purpose of conducting activities assigned to it under the Inhaled Plan, provided that (a) the subcontractor undertakes in writing obligations of confidentiality and non-use regarding Confidential Information, that are substantially the same as those undertaken by the Parties pursuant to Article 14 hereof, and (b) the subcontractor agrees in writing to assign or otherwise grant exclusive, sublicensable rights to all intellectual property developed in the course of performing any such work under the Inhaled Plan to the Party retaining such subcontractor. Each Party shall remain responsible for any obligations under the Inhaled Plan that have been delegated or subcontracted to any subcontractor, and shall be responsible for the performance of its subcontractors.

3.8 Regulatory Matters. During the Inhaled Collaboration Term, GSK shall prepare, own and maintain all Regulatory Materials filed with Regulatory Authorities in the Territory in connection with the activities to be undertaken pursuant to the Inhaled Plan. As reasonably requested by GSK from time to time during the Inhaled Collaboration Term, Liquidia shall, at Liquidia's expense, promptly provide assistance to GSK with its filings and other interactions with Regulatory Authorities.

ARTICLE 4
OPTION RIGHTS; RIGHT OF FIRST NEGOTIATION

4.1 Liquidia Respiratory Option.

(a) During the Term, Liquidia has the right to develop the Liquidia Respiratory Product, and GSK shall have the right, but not the obligation, to contribute to the development of the Liquidia Respiratory Product as may be agreed by the Parties.

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(b) Subject to the terms and conditions of this Agreement, Liquidia hereby grants to GSK an exclusive option, exercisable at GSK's sole discretion, to obtain the Liquidia Respiratory License described in Section 5.2(a) (the "**Liquidia Respiratory Option**").

(c) At such time as (i) Liquidia has compiled a data package for the Liquidia Respiratory Product sufficient to present to prospective licensees, or (ii) at GSK's written request, Liquidia shall present to GSK via the JSC such data package referred to in (i) above, or if (ii) is applicable, then Liquidia shall present to GSK a data package for the Liquidia Respiratory Product that contains all relevant material information and data reasonably requested by GSK at such time (for clarity, Liquidia shall not be required to provide GSK with PRINT Tooling). Thereafter, GSK may exercise the Liquidia Respiratory Option by providing written notice to Liquidia at any time before or upon the expiration of the Inhaled Collaboration Term (the "**Respiratory Option Notice**").

(d) If the Respiratory Option Notice is not provided by GSK before or upon the expiration of the Inhaled Collaboration Term, then: (i) the Liquidia Respiratory Option shall expire, and (ii) Liquidia shall have the right, in its discretion, to continue the development and commercialization of the Liquidia Respiratory Product, either on its own or in collaboration with a Third Party, with no further obligations to GSK.

4.2 Inhaled Option.

(a) Subject to the terms and conditions of this Agreement, Liquidia hereby grants to GSK an exclusive option, exercisable at GSK's sole discretion, to obtain the Inhaled License described in Section 5.2(b) (the "**Inhaled Option**").

(b) GSK may exercise the Inhaled Option by providing written notice to Liquidia (the "**Inhaled Option Notice**") at any time before or upon the date that is six (6) months after the expiration of the Inhaled Collaboration Term and receipt by GSK of all the final data and results generated by or on behalf of Liquidia under the Inhaled Collaboration (the "**Inhaled Option Period**").

(c) If the Inhaled Option Notice is not received by Liquidia before or upon the expiration of the Inhaled Option Period, then: (i) the Inhaled Option shall expire, (ii) each Party shall have the right to practice and/or license the Joint Inhaled Collaboration Know-How as joint owner, without any requirement of gaining the consent of, or accounting to, the other Party, (iii) each Party shall provide the other Party with copies of all Joint Inhaled Collaboration Know-How generated in the course of performing the Inhaled Plan not already in the receiving Party's possession.

(d) Notwithstanding anything to the contrary herein, if GSK exercises the Inhaled Option, then each Party shall thereafter have the right to practice and/or license its interests in the Joint Inhaled Collaboration Know-How outside the Inhaled Field (but not in the Exercised Disease Fields, if the Vaccine Option has been exercised under the terms of the Vaccine Collaboration Agreement) as joint owner, without any requirement of gaining the consent of, or accounting to, the other Party.

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4.3 Right of First Negotiation. If during the Inhaled Option Period and/or Vaccines Option Period, Liquidia desires to grant a non-exclusive license to its interest in the Joint Inhaled Collaboration Know-How or Joint Vaccines Collaboration Know-How as described in Section 11.4(b)(iii), then it shall first notify GSK and GSK Bio of such desire in writing, describing in reasonable detail the scope of the license it is interested in granting to a Third Party from whom Liquidia has received a term sheet or letter of intent (the **"ROFN Notice"**) and GSK and/or GSK Bio thereafter shall have the exclusive right of first negotiation to obtain an exclusive, worldwide, sublicensable license to Liquidia's interest in the Joint Inhaled Collaboration Know-How or Joint Vaccines Collaboration Know-How, as applicable, and any other intellectual property rights (which may include Liquidia Technology) then controlled by Liquidia that are necessary or reasonably useful for the making, having made, use, sale, offering for sale or importation of products in the applicable field (i.e. a field outside vaccines applications and/or the Inhaled Field). GSK or GSK Bio shall have thirty (30) days from the receipt of the ROFN Notice to inform Liquidia in writing of its election to negotiate the terms of such exclusive license, and another thirty (30) days to submit to Liquidia an initial proposal for the terms of such exclusive license. If GSK or GSK Bio delivers such notice during the first thirty (30) day period and submits the initial proposal within the second thirty (30) day period, Liquidia shall negotiate exclusively in good faith with GSK or GSK Bio, for a period not to exceed six (6) months from GSK's or GSK Bio's receipt of the ROFN Notice (the **"Negotiation Period"**), the terms under which Liquidia will grant such exclusive license to GSK or GSK Bio. If GSK or GSK Bio and Liquidia fail to reach a binding written agreement for the exclusive license by the end of the Negotiation Period, then Liquidia shall be free to negotiate with any Third Party for a non-exclusive license within the same applicable field that was the subject of negotiations with GSK or GSK Bio, and to grant such non-exclusive license to any Third Party; provided, that if Liquidia grants such non-exclusive license to a Third Party within nine (9) months after the expiration of Negotiation Period, then the terms of such Third Party license shall be no less favorable to Liquidia than the terms last proposed by GSK or GSK Bio to Liquidia. Notwithstanding anything to the contrary, the licenses that Liquidia may grant to a Third Party in a particular proposed field include Joint Inhaled Collaboration Know-How or Joint Vaccines Collaboration Know-How, as the case may be, that arises during the Inhaled Collaboration Term or Vaccine Collaboration Term, as the case may be, including after the date of the ROFN Notice, and all such Joint Inhaled Collaboration Know-How or Joint Vaccines Collaboration Know-How (including any Joint Inhaled Collaboration Know-How or Joint Vaccines Collaboration Know-How that arises after the expiration of Negotiation Period) shall be thereafter excluded from and not subject to this Section 4.3 as to the particular field proposed to GSK. Further, each time Liquidia desires to grant a non-exclusive license to the Joint Inhaled Collaboration Know-How or Joint Vaccines Collaboration Know-How in a different field than previously proposed to GSK in the right of first negotiation described in this Section 4.3, either to the same Third Party or a different Third Party, then such additional license in a different field shall first be offered to GSK or GSK Bio on the terms set forth above. Subject to Section 4.4 below, Liquidia shall be free to grant non-exclusive licenses to its interest in the Joint Inhaled Collaboration Know-How or Joint Vaccine Collaboration Know-How outside the field of prescription pharmaceutical drugs, products sold on an over-the-counter basis after switching from a prescription basis, or biological products (including biosimilar products) at any time, and the right of first negotiation described in this Section 4.3 shall only apply in the field of prescription pharmaceutical products, pharmaceutical products sold on an over-the-counter basis after switching from a prescription

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basis, or vaccine or biological products (including biosimilar products). For purposes of this Section 4.3, "biological products" means any products that cause a biological effect in humans, including, for example, vaccines, monoclonal antibodies and cytokines.

4.4 Consumer Health and Diagnostics. During the Inhaled Option Period and/or Vaccines Option Period, Liquidia shall have the right to grant a non-exclusive license to its interests in the Joint Inhaled Collaboration Know-How or Joint Vaccines Collaboration Know-How as described in Section 11.4(b)(iii) for use in the consumer healthcare field or diagnostic field; provided, that it shall first notify GSK and GSK Bio of such desire in writing, describing in reasonable detail the scope of the license it is interested in granting to a Third Party.

ARTICLE 5
LICENSES

5.1 Collaboration License Under Liquidia Technology. Subject to the terms and conditions of this Agreement, Liquidia hereby grants to GSK a non-exclusive, worldwide, sublicensable license, under the Liquidia Technology for the sole purpose of carrying out GSK's obligations and research rights under the Inhaled Plan, which license shall become effective on the Effective Date and shall expire upon the earlier of the expiration of the Inhaled Collaboration Term (as may be extended under Section 3.3) or GSK's exercise of the Inhaled Option. The license grant in this Section 5.1 will include the right to have made Research Materials as further described in Section 5.2(c)(i).

5.2 Development and Commercial Licenses.

(a) Liquidia Respiratory License. Upon GSK's exercise of the Liquidia Respiratory Option pursuant to Section 4.1(c) and subject to the terms and conditions of this Agreement, Liquidia shall be deemed to have granted and hereby grants to GSK an exclusive, worldwide, royalty bearing license, with the right to grant sublicenses solely as provided in Section 5.4, under the Liquidia Technology and Liquidia's interest in and to Joint Inhaled Collaboration Patents and Joint Inhaled Collaboration Know-How and Liquidia's interest in and to Joint Vaccine Collaboration Know-How and Joint Vaccine Collaboration Patents to make, have made, use, sell, offer for sale and import the Liquidia Respiratory Product in the Liquidia Respiratory Field in the Territory (the "**Liquidia Respiratory License**").

(b) Inhaled License. Upon GSK's exercise of the Inhaled Option pursuant to Section 4.2(b) and subject to the terms and conditions of this Agreement, Liquidia shall be deemed to have granted and hereby grants to GSK an exclusive, worldwide, royalty bearing license, with the right to grant sublicenses solely as provided in Section 5.4, under the Liquidia Technology, Liquidia's interest in and to Joint Inhaled Collaboration Patents and Joint Inhaled Collaboration Know-How and Liquidia's interest in and to Joint Vaccine Collaboration Know-How and Joint Vaccine Collaboration Patents to make, have made, use, sell, offer for sale and import Research Products and Inhaled Products (which, for clarity, excludes the Liquidia Respiratory Product) in the Inhaled Field in the Territory (the **"Inhaled License"**).

(c) Additional License Terms. Notwithstanding anything to the contrary herein, the use of the terms "have made" and "make" in the license granted to GSK under

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Section 5.1, as well as the Liquidia Respiratory License in Section 5.2(a) and the Inhaled License in Section 5.2(b), shall be subject to the additional terms and restrictions set forth below.

(i) GSK's license under Section 5.1 to "have made" Research Materials shall be limited to the right to engage a Third Party reasonably acceptable to Liquidia to make Research Materials using PRINT molds supplied by Liquidia (including the right to manufacture PRINT Material) if Liquidia cannot fulfill its obligation to supply Research Materials under Section 9.1(a); provided, that such Third Party shall not have the right to use or access PRINT Tooling unless Liquidia also fails to supply PRINT molds as described above, in which case, Liquidia also shall provide PRINT Tooling to such Third Party. In addition, the foregoing right to "have made" shall apply only when the Parties reasonably agree, based on discussion at the JSC as described in Section 2.1(d)(viii), that engagement of a Third Party as described above is more likely to decrease the delay of conducting the Inhaled Plan due to lack of supply of PRINT Materials and Research Materials than allowing Liquidia to cure such inability to supply.

(ii) GSK's right to "make" and "have made" Liquidia Respiratory Product, Research Products and Inhaled Products as set forth in Sections 5.2(a) and (b) shall be limited as follows:

(A) after exercise of the Liquidia Respiratory Option or Inhaled Option, as applicable, GSK shall have the right to make, and to engage a Third Party reasonably acceptable to Liquidia to make, the Liquidia Respiratory Product or Research Products, as applicable, using PRINT molds supplied by Liquidia (including the right to manufacture PRINT Material), if Liquidia cannot or does not supply PRINT Materials or Research Products in accordance with an agreed Development Supply Agreement, as required for GSK to develop the Liquidia Respiratory Product or Research Products; provided that GSK and such Third Party shall not have access to or the right to use PRINT Tooling under this Section 5.2(c)(ii)(A), subject to Section 5.2(c)(ii)(B);

(B) after exercise of the Liquidia Respiratory Option or Inhaled Option, as applicable, GSK shall have the right to make, and to engage a Third Party reasonably acceptable to Liquidia to make, the Liquidia Respiratory Product or Research Products, as applicable, using PRINT and PRINT Tooling if either (1) the conditions of Section 5.2(c)(ii)(A) are met and Liquidia does not or cannot supply PRINT molds as set forth in Section 5.2(c)(ii)(A), or (2) the Parties cannot agree to the terms of a Development Supply Agreement; and

(C) after exercise of the Liquidia Respiratory Option or Inhaled Option, as applicable, and either (1) failure of Liquidia to fulfill its obligations under the Commercial Supply Agreement described in Section 9.2, including manufacture in accordance with GMP and GSK's quality standards, (2) the Parties' inability to agree on commercially reasonable terms of a Commercial Supply Agreement, or (3) GSK's assessment, in its sole discretion, that Liquidia shall not be GSK's supplier (in which case no Commercial Supply Agreement will be entered into between GSK and Liquidia), then, in each case, GSK shall have the right to make, and to engage a Third Party to make the Liquidia Respiratory Product, Research Products or Inhaled Products, as applicable, using PRINT and PRINT Tooling

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(including the right to manufacture PRINT Material) for development of Research Products that require commercial grade supply or for development and commercialization of Inhaled Products.

5.3 Liquidia Retained Rights. Notwithstanding the licenses granted to GSK in Sections 5.1 and 5.2 above, and to GSK Bio in Sections 5.1 and 5.2 of the Vaccine Collaboration Agreement, Liquidia retains the following: (a) the right to practice the Liquidia Technology to exercise its rights or to fulfill its obligations under this Agreement and the Vaccine Collaboration Agreement; and (b) the exclusive right to practice and license the Liquidia Technology outside the scope of the rights granted to GSK in this Agreement and GSK Bio in the Vaccine Collaboration Agreement.

5.4 Sublicense Rights.

(a) GSK shall have the right to grant sublicenses of the licenses granted in Section 5.2 to its Affiliates (for so long as such entity remains an Affiliate) or Third Parties. GSK shall remain responsible for all of its sublicensees' activities and any and all failures by its sublicensees to comply with the applicable terms of this Agreement.

(b) GSK shall promptly notify Liquidia of any material sublicense to a Third Party and provide Liquidia with a true and complete copy of such sublicense agreement; provided, that GSK shall be permitted to redact all financial information from such sublicense agreement and each such sublicense agreement will be considered the Confidential Information of GSK. Each such sublicense agreement shall be consistent with the terms and conditions of this Agreement and shall include the following terms and conditions:

(i) the sublicensee shall be bound by and subject to all applicable terms and conditions of this Agreement in the same manner and to the same extent as GSK is bound thereby; and

(ii) GSK and Liquidia shall have the same rights, ownership and/or licenses to all Know-How generated by such sublicensee to the same extent as if such Know-How was generated by GSK.

5.5 Licenses Under GSK Technology. Subject to the terms and conditions of this Agreement, GSK hereby grants to Liquidia (a) a non-exclusive, worldwide license, under GSK Technology for the sole purpose of carrying out Liquidia's obligations under the Inhaled Plan, which license shall become effective on the Effective Date and shall expire upon the expiration of the Inhaled Collaboration Term; and (b) a non-exclusive, worldwide license, with the right to grant sublicenses through multiple tiers, under the PRINT Improvements for uses outside the Exercised Fields. In the event that Liquidia or its Affiliates or sublicensees sells any product that utilizes PRINT Improvements licensed to Liquidia, then GSK shall be entitled to receive a royalty of [***] percent ([***]%) of net sales of such products sold by or on behalf of Liquidia, and [***] percent ([***]%) of any payments (including royalties, fees and milestones) received by Liquidia from its sublicensees on the sale of any such product, on a country-by-country basis, commencing upon the First Commercial Sale of such product in any country and expiring upon the date that is ten (10) years after the First Commercial Sale of the product in such country. Thereafter, the license granted by GSK under Section 5.5(b) shall continue and become

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perpetual, royalty free and fully paid. In addition, if it is necessary for Liquidia to obtain a license from a Third Party in order to practice the PRINT Improvements in order to sell such product, then the payment due to GSK shall be reduced by an amount equal to [***] percent ([***]%) of the license payments paid by Liquidia to such Third Party pursuant to such license on account of such sale; and provided further that, in no event shall the amount due to GSK be reduced to less than [***] percent ([***]%) of the payment otherwise due to GSK on such sale in any particular calendar quarter, and Liquidia shall have the right to carry forward to subsequent calendar quarters any Third Party payment deductions that Liquidia is unable to deduct.

5.6 No Implied Licenses. Except as explicitly set forth in this Agreement, neither Party shall be deemed by estoppel or implication to have granted the other Party any option, license or other right to any intellectual property right of such Party. Neither Party shall, nor permit any of its Affiliates or sublicensees to, practice any intellectual property rights licensed to it by the other Party outside the scope of the licenses granted to it under this Agreement.

5.7 UNC and Third Party Agreements.

(a) GSK acknowledges and agrees that it has received an unredacted copy of the UNC License, UNC Research Agreement and UNC Material Transfer Agreement, as well as a partially redacted copy of the Consulting Agreement. GSK further acknowledges that Liquidia has the right to extend the term of the UNC Research Agreement to enable UNC to conduct further research under the applicable Research Program (as defined in the UNC Research Agreement), subject to the conditions set forth in this Agreement. Any and all research to be conducted by UNC or by the Consultant under the Research Program, under the UNC Material Transfer Agreement or under the Consulting Agreement that would otherwise be within the Inhaled Field or Co-Delivery Vaccine Field shall be discussed at the JSC as provided in Section 2.1 (for so long as the JSC is in existence, and thereafter the Parties shall discuss between them or at the Advisory Council as reasonably required), and Liquidia shall acquire an exclusive license to any and all University Inventions, inventions made under the UNC Material Transfer Agreement and inventions made under the Consulting Agreement, that are necessary or useful in the Inhaled Field or Co-Delivery Vaccine Field (including inventions that fall outside the Inhaled Field or Co-Delivery Vaccine Field but are related to General Biological Effects). Liquidia shall not authorize or enable any Third Party (other than UNC) to conduct research using PRINT or PRINT Materials in the Inhaled Field or Co-Delivery Vaccine Field, and shall ensure that UNC and the Consultant do not enable a Third Party (other than UNC) to conduct research using PRINT or PRINT Materials in the Inhaled Field or Co-Delivery Vaccine Field, in either case, without the prior written consent of GSK. If UNC or Consultant desires to enter into an agreement with a Third Party relating to PRINT or PRINT Materials outside the Inhaled Field or Co-Delivery Vaccine Field, then, unless GSK and Liquidia mutually determine otherwise, Liquidia shall obtain a non-exclusive, sublicensable, royalty free license to any inventions made by such Third Party under such agreement prior to Liquidia giving consent for UNC or Consultant to enter into such Third Party agreement. Upon GSK's request, Liquidia shall use Commercially Reasonable Efforts to acquire an exclusive license to inventions arising from research conducted by Third Parties outside the Inhaled Field and Co-Delivery Vaccine Field, if such inventions are related to General Biological Effects. Any University Inventions or Third Party inventions or inventions covered by the Consulting Agreement or UNC Material Transfer

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Agreement for which Liquidia obtains ownership or Control as described in this Section 5.7 (including control through a non-exclusive sublicenseable license), and that are Liquidia Know-How or are encompassed within Liquidia Patents shall be, and are, automatically included in the Inhaled License or Liquidia Respiratory License to the extent the Inhaled Option or Liquidia Respiratory Option, respectively, has been exercised by GSK, without further action by the Parties or payment by GSK. GSK hereby acknowledges and agrees that GSK's rights to some such inventions arising from UNC Third Party research activities may be limited to non-exclusive rights.

5.8 Liquidia Technology Transfer. Promptly following the exercise of the Liquidia Respiratory Option and/or Inhaled Option, as the case may be, and no later than ninety (90) days following such exercise, to the extent not previously transferred and delivered to GSK, Liquidia shall transfer and deliver to GSK, Liquidia Technology and Joint Inhaled Collaboration Know-How and Joint Vaccine Collaboration Know-How in its Control, to enable GSK to practice under the Liquidia Respiratory License and/or Inhaled License as contemplated under this Agreement; provided, that transfer, if any, of PRINT, PRINT Tooling and Know-How covering the manufacture by or on behalf of GSK of PRINT Material, Research Materials, Research Products, Inhaled Products and the Liquidia Respiratory Product pursuant to Article 9 and Section 5.2 shall be governed by Section 9.3 and not by this Section 5.8. After the transfer described above, Liquidia shall use Commercially Reasonable Efforts to cooperate with GSK to provide GSK with any additional Liquidia Technology, to the extent not previously transferred and delivered to GSK, to which Liquidia obtains Control as it may be developed, identified or exist and

that is included within the scope of the Liquidia Respiratory License or Inhaled License, as the case may be. Costs of technology transfers under this Section 5.8 shall be borne by Liquidia.

5.9 Data Exchange in Absence of Option Exercise. In the event that GSK exercises one of, but not both, the Inhaled Option or the Liquidia Respiratory Option under this Agreement, then GSK shall promptly provide Liquidia with copies of Joint Inhaled Collaboration Know-How that is not already in its possession and Liquidia shall have the right to use and reference all such Joint Inhaled Collaboration Know-How in the Retained Field. **"Retained Field"** means the Liquidia Respiratory Field if the Liquidia Respiratory Option is not exercised by GSK or the Inhaled Field if the Inhaled Option is not exercised by GSK.

ARTICLE 6
PRODUCT DEVELOPMENT

6.1 General. After the exercise of the Liquidia Respiratory Option or the Inhaled Option, as applicable, GSK shall be solely responsible for the continued development of the Liquidia Respiratory Product or Research Products in the applicable Exercised Field, at GSK's cost and expense, subject to the supply by Liquidia of GSK's requirements for PRINT Materials, Liquidia Respiratory Product and/or Research Products as set forth in Section 9.1(b).

6.2 Diligence. After the exercise of the Inhaled Option or Liquidia Respiratory Option, as applicable, GSK shall use Commercially Reasonable Efforts to develop and seek Regulatory Approval in the Territory, for the Liquidia Respiratory Product and Research Products in the applicable Exercised Field(s). Without limiting the foregoing, if GSK exercises the Inhaled Option and fails to initiate any Clinical Trial on at least [***] Research Product in

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the Inhaled Field within six (6) years after the Effective Date (such event, a "**Development Delay**"), GSK shall provide Liquidia with a written explanation of the Development Delay for the applicable Research Products. If the Development Delay was not caused solely or primarily for valid scientific reasons (which would include issues with respect to safety and efficacy as well as delays due to feedback from Regulatory Authorities, whether related to the PRINT Material used in the Research Product or the GSK Material contained in the Research Product), then Liquidia shall have the right, but not the obligation, to convert the Inhaled License to a non-exclusive license upon written notice to GSK; provided, that conversion of the Inhaled License to non-exclusive shall be Liquidia's sole and exclusive remedy in the event of a Development Delay and Liquidia shall not have the right to terminate this Agreement in accordance with Section 15.3; and provided, further that if the Development Delay is caused by the failure of Liquidia or its contract manufacturer to provide GSK with its required supply of PRINT Materials or Research Products then Liquidia shall not have the right to convert the Inhaled License to non-exclusive. In addition, and notwithstanding anything to the contrary, GSK's obligation to use Commercially Reasonable Efforts is agreed by the Parties to be dependent upon GSK's timely receipt of GSK's requirements of viable PRINT Materials or Research Products that meet all applicable specifications agreed to by the Parties and/or Liquidia's third party contract manufacturer. Any failure to timely deliver PRINT Materials or Research Products to GSK as described above by Liquidia or a third party contract manufacturer, and any subsequent delays or modifications to GSK's development plans with respect to any Research Product resulting from such failure to supply shall not be deemed to be GSK's failure to use Commercially Reasonable Efforts under this Section 6.2.

6.3 Development Records and Reports. GSK shall maintain complete, current and accurate records of all development activities conducted by it hereunder, and all data and other Know-How resulting from such activities in accordance with the principles set forth in Section 3.5(b) and 3.6. Upon expiration of the JSC Term, at Liquidia's request, which request shall not be made more frequently than annually until such earlier time as GSK either files the first NDA for a particular Research Product or ceases development of a particular Research Product, GSK shall provide Liquidia with written reports summarizing the material activities of GSK with respect to the development of such Research Product in the Territory, to enable Liquidia to determine GSK's compliance with its diligence obligations hereunder; provided, that GSK shall not be required to provide any confidential or proprietary information regarding any GSK Material, whether owned by GSK or licensed to GSK by a Third Party. If Liquidia has any questions with respect to the information set forth in any report provided by GSK under this Section 6.3, then Liquidia shall direct such questions to GSK's Alliance Manager and GSK shall make reasonably available to Liquidia appropriate technical or scientific personnel who are knowledgeable about the development activities conducted by GSK with respect to the Research Products that are the subject of the report, to respond to such questions in a timely manner, via teleconference, in person or such other mode of communication as the Parties may mutually agree, subject always to the proviso set forth in the preceding sentence.

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ARTICLE 7
REGULATORY MATTERS

7.1 Regulatory Responsibilities.

(a) GSK Responsibilities. After the exercise of the Liquidia Respiratory Option or the Inhaled Option, GSK shall be solely responsible, at its expense, for preparing, filing and maintaining Regulatory Materials for the Research Products and Products. GSK shall own all Regulatory Materials for the Research Products and Products.

(b) Liquidia Responsibilities. Notwithstanding the foregoing, (i) to the extent applicable in the event that Liquidia is responsible for the manufacture and supply of the PRINT Materials and the same PRINT Material is used in more than one Research Product or Products, Liquidia shall be responsible, at its cost, for the preparation, filing and maintenance of the Drug Master File(s) related to PRINT and PRINT Materials (the **"PRINT DMF"**), and GSK shall be permitted to review and cross-reference the PRINT DMF in its Regulatory Materials and filings for Research Products and Products, and (ii) in the event that filing of a PRINT DMF is not applicable, Liquidia shall make available to GSK all required chemistry, manufacturing and controls (**"CMC"**) data, at Liquidia's cost, related to PRINT and PRINT Materials required for filing with the applicable Regulatory Authorities in connection with the Research Products and Products, and GSK shall use such CMC data solely for such purpose in accordance with the terms and conditions of this

Agreement including the scope of the license grant. At Liquidia's reasonable request, GSK shall provide Liquidia, at GSK's cost, with all required assistance with respect to the preparation, filing and maintenance of the PRINT DMF that GSK intends to cross-reference. Liquidia shall keep GSK informed of any changes to the PRINT DMF (or CMC data in the event that PRINT DMF is not applicable) to enable GSK to update its Regulatory Materials and filings related to Research Products and Products in a timely manner. To the extent either Party receives communications and/or responses from any Regulatory Authority with respect to the PRINT DMF or CMC data, such Party shall inform and consult with the other Party with respect to such communications and responses, and to the extent permitted by applicable Laws, the other Party shall be permitted to attend as an announced but silent observer, any meetings between such Party and Regulatory Authorities that are related to the PRINT DMF or CMC data as they relate to Research Product or Products.

7.2 Regulatory Matters. GSK shall keep Liquidia reasonably informed of all material regulatory developments relating to the safety of the PRINT Materials used in the Research Products or Products, shall promptly notify Liquidia each time the PRINT DMF is cross-referenced by GSK in its Regulatory Filings, and shall provide Liquidia with copies of the portion of such Regulatory Filing that is related to the safety of the PRINT Materials or the PRINT DMF. In addition, GSK shall promptly notify Liquidia of the filing of MAAs and receipt of Regulatory Approvals in the United States, any Major EU Market and Japan. Each Party shall provide the other Party with reasonable advance notice of all material meetings and planned discussions scheduled with the FDA or EMA concerning a Research Product or Product that are expected to relate to the safety of the PRINT Materials or PRINT DMF, and each Party shall provide the other Party with all reasonable assistance, at the other Party's request and at the providing Party's cost, with respect to the other Party's preparation for such meeting or discussion within a reasonable timeframe any technical information related to PRINT or the PRINT Material used in the applicable Research Product or Product that would be necessary or useful to such meeting or discussion. Each Party shall consider in good faith any input from the other Party in preparing for such meetings or discussions. To the extent permitted by applicable Laws, the other Party shall have the right to attend as an announced but silent observer any such

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meetings or discussions solely to the extent relevant to the safety of PRINT Materials or PRINT DMF. If the other Party does not attend such meetings or discussions, such Party shall provide the other Party with written summaries of such meetings or discussions with respect to the safety of PRINT Materials or PRINT DMF as soon as practicable after the conclusion thereof.

7.3 Notification of Threatened Action. Except as provided in Section 7.4, GSK or Liquidia, as the case may be, shall immediately notify the other Party of any information it receives regarding any threatened or pending action, inspection or communication by or from any Third Party, including a Regulatory Authority, which may materially affect the development, commercialization or regulatory status of any Research Product or Product, or which may materially affect PRINT, PRINT Tooling or the PRINT Material. Upon receipt of such information, the Parties shall consult with each other in an effort to coordinate, to the extent reasonably necessary on appropriate action.

7.4 Adverse Event Reporting. If GSK exercises the Inhaled Option or Liquidia Respiratory Option, then GSK and Liquidia shall enter into a written pharmacovigilance agreement prior to GSK commencing the first Phase I Clinical Trial with the Liquidia Respiratory Product or the first Research Product, as the case may be, setting forth mutually acceptable guidelines and procedures for the receipt, investigation, recordation, and communication of adverse events and safety data that relate to the PRINT Material. Such guidelines and procedures shall be in accordance with, and enable the Parties to fulfill, each Party's reporting obligations under applicable Laws. Each Party shall comply with its respective obligations under such pharmacovigilance agreement and shall cause its Affiliates and permitted sublicensees to comply with such obligations. GSK shall be responsible for creating and maintaining a global safety database for each Research Product and Product in the applicable Exercised Field, at GSK's expense. GSK shall be responsible for reporting quality complaints, adverse events and safety data related to each Research Product or Product to applicable Regulatory Authorities, as well as responding to safety issues and to all requests of Regulatory Authorities relating to the Research Products and Products; provided that Liquidia shall cooperate as required by GSK to the extent the foregoing are related to PRINT or the PRINT Materials and will supply GSK with all information requested by GSK to allow GSK to fulfill its reporting obligations hereunder. GSK will provide Liquidia with reasonable access to such safety database and promptly report any adverse events related to the PRINT Materials reasonably in advance of any reporting to the applicable Regulatory Authority where practical.

7.5 Remedial Actions. GSK shall have the right to decide whether any recall, corrective action or other regulatory action with respect to any Product taken by virtue of applicable Laws (a "**Remedial Action**") with respect to Products should be commenced, with advance notice, if reasonably practicable, to Liquidia; provided, that GSK shall have the right to make the final decision, in GSK's sole discretion, regarding whether or not any Product shall be recalled. GSK shall bear the costs of any Remedial Action except for any Remedial Action that is initiated due to a defect arising solely from Liquidia's (or a Third Party's on behalf of Liquidia) failure to manufacture, test, package, store, label, release or deliver any PRINT Materials or Products in compliance with the applicable specifications, quality agreement, GMP and/or applicable Laws, in which case Liquidia shall (a) bear all reasonable costs of the administration of such Remedial Action, and (b) reimburse GSK for (i) the price paid by GSK to

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Liquidia for the PRINT Materials contained in such recalled Product, (ii) the actual costs for shipping (including freight and insurance), applicable transit charges, insurance premiums, duties, or taxes paid in connection with such recalled Product, and (iii) all direct manufacturing costs (labor and material charges at cost with no mark-up) incurred by GSK to re-manufacture any recalled Product.

ARTICLE 8
COMMERCIALIZATION

8.1 Responsibility; Diligence. After the exercise of the Liquidia Respiratory Option or the Inhaled Option, GSK will be solely responsible for, and use Commercially Reasonable Efforts to, commercialize the Liquidia Respiratory Product and each Inhaled Product in the applicable Exercised Field in countries in which Regulatory Approval is obtained. Such commercialization may include the following activities, conducted by or on behalf of GSK, in GSK's sole discretion; provided, nothing in this Agreement obligates GSK to conduct any of the following specific commercialization activities with respect

to the Liquidia Respiratory Product or any Inhaled Product: (a) developing and executing a commercial launch strategy and plan for the Liquidia Respiratory Product and each such Inhaled Product; (b) negotiating with applicable Governmental Authorities regarding the price and reimbursement status of the Liquidia Respiratory Product and Inhaled Product; (c) marketing and promotion; (d) booking sales and distribution and performance of related services; (e) handling all aspects of order processing, invoicing and collection, inventory and receivables; and (f) providing customer support, including handling medical queries, and performing other related functions. GSK shall keep Liquidia reasonably informed on the commercialization of the Liquidia Respiratory Product and each Inhaled Product, including annual written reports summarizing significant commercialization activities for the Liquidia Respiratory Product and each Inhaled Product.

ARTICLE 9
MANUFACTURE AND SUPPLY

9.1 Research and Development Supply.

(a) Research Materials. Liquidia will be responsible for, and shall use Commercially Reasonable Efforts to, manufacture and supply all of the PRINT Materials and Research Materials reasonably required by GSK and Liquidia to carry out the Inhaled Plan as described therein; provided, that the costs and expenses in connection therewith shall be included in Collaboration Costs, subject to the limitations set forth in Section 3.4. Liquidia shall not be required to provide GSK with GMP supply of PRINT Materials and Research Materials during the Inhaled Collaboration Term prior to GSK's exercise of the Inhaled Option unless otherwise agreed by the Parties. If the JSC determines, due to an inability of Liquidia to timely manufacture and supply PRINT Materials and Research Materials reasonably required by GSK and Liquidia to carry out the Inhaled Plan (including GMP compliant PRINT Materials and Research Materials, if agreed by the Parties), that there shall be a manufacturing technology transfer as described in Sections 2.1(d)(viii) and 5.2(c)(i) and not an extension of the Inhaled Collaboration Term as described in Section 3.3(c), then GSK shall select a Third Party manufacturer that is reasonably acceptable to Liquidia to manufacture and supply GSK's requirements of PRINT Materials and Research Materials for the Inhaled Plan and Liquidia shall

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initiate a technology transfer of PRINT (but not the PRINT Tooling) to such Third Party and continue to provide PRINT molds to such Third Party to enable such Third Party to make Research Materials; provided, that if Liquidia fails to supply PRINT molds, then Liquidia also shall provide PRINT Tooling to such Third Party. For clarity, the technology transfer described in Sections 9.1(a), 5.2(c)(i) and 9.3 shall not apply if Liquidia's lack of timely manufacture and supply of PRINT Materials and Research Materials as described above is due primarily to technical or scientific infeasibility, for example, with respect to creating the PRINT Materials or Research Materials contemplated under the Inhaled Plan. Alternatively, the technology transfer described in this Section 9.1(a) may apply, after discussion at the JSC, if Liquidia's lack of timely manufacture and supply of PRINT Materials and Research Materials is due primarily to, for example, Liquidia's failure to fulfill its manufacture and supply obligations with respect to PRINT Materials or Research Materials that are technically or scientifically feasible in amounts contemplated under the Inhaled Plan, or an operational failure of PRINT that the JSC determines can be remedied faster by consummating a manufacturing technology transfer to a Third Party.

(b) Research Products. Liquidia will be responsible for manufacture and supply in accordance with GMP and GSK's quality standards all of the PRINT Materials, Liquidia Respiratory Product and/or Research Products (as applicable) reasonably required by GSK, its Affiliates and sublicensees for use in the development of the Research Products after the exercise of the Inhaled Option or Liquidia Respiratory Option and before the commencement of the first pivotal Clinical Trial for which Regulatory Authorities require commercial grade supply of the Liquidia Respiratory Product or Research Product, subject to and in accordance with the commercially reasonable terms and conditions of a clinical development and supply agreement to be mutually agreed and negotiated by the Parties (the **"Development Supply Agreement"**). The Parties will use reasonable efforts to negotiate the commercially reasonable terms of the Development Supply Agreement promptly after the exercise of the Inhaled Option and/or Liquidia Respiratory Option, as the case may be, which shall include provisions consistent with GSK's rights set forth in Section 5.2(c)(ii) in the event that Liquidia cannot or does not supply in accordance with the terms of such Development Supply Agreement; provided, that if the Parties cannot agree to the terms of a Development Supply Agreement then GSK's right to make and have made PRINT Materials, Liquidia Respiratory Product and/or Research Products as set forth in Sections 5.2(a), 5.2(b) and 5.2(c)(ii) shall apply.

9.2 Commercial Supply. GSK shall have the right to conduct a new contractor assessment of Liquidia to determine, in its sole discretion, that Liquidia is acceptable to GSK for the purposes of supplying PRINT Materials, Liquidia Respiratory Product, Research Products and Inhaled Products (but only if Inhaled Products are the same as Research Products and do not require further formulation or other work in order to be considered appropriate for commercial supply and development requiring commercial grade supply) for clinical trials requiring commercial grade supply and, if applicable, for further formulation work by GSK or a Third Party as Inhaled Products for commercialization on a worldwide basis. Such assessment of Liquidia's manufacturing capabilities will be conducted at the appropriate time to allow for technology transfer, if required, prior to manufacture of pivotal clinical trial material.

(a) If GSK determines in its sole discretion, based on GSK standard assessment criteria for contract manufacturing organizations, that Liquidia is acceptable to GSK

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for the supply of PRINT Materials, Liquidia Respiratory Product, Research Products and/or Inhaled Products, as applicable, for the purposes described above in this Section 9.2, then subject to Section 9.2(b), Liquidia will be responsible for manufacture and supply in accordance with GMP and GSK's quality standards all of the PRINT Materials, Research Products, Liquidia Respiratory Product and/or Inhaled Products (as applicable) required by GSK, its Affiliates and sublicensees, subject to and in accordance with the commercially reasonable terms and conditions of a commercial supply agreement to be mutually agreed and negotiated by the Parties (the **"Commercial Supply Agreement"**). Consistent with GSK's rights as set forth in Section 5.2, such Commercial Supply Agreement shall provide that if Liquidia is unable to supply PRINT Materials, Liquidia Respiratory Product, Research Products or Inhaled Products as required by GSK, its Affiliates and sublicensees under the terms of the Commercial Supply Agreement, then upon GSK's request, Liquidia shall

commence a technology transfer to GSK or GSK's Third Party manufacturer of PRINT, PRINT Tooling and any other information and technology reasonably necessary for GSK or GSK's Third Party manufacturer to manufacture and supply such requirements of the PRINT Materials, Liquidia Respiratory Product, Research Products or Inhaled Products. The Parties shall use Commercially Reasonable Efforts to jointly develop and complete a detailed technology transfer project plan within thirty (30) days after GSK's request to Liquidia to commence such technology transfer.

(b) If GSK determines in its sole discretion, based on GSK standard assessment criteria for contract manufacturing organizations, that Liquidia is either (i) not acceptable to GSK, or (ii) acceptable to GSK but GSK elects not to use Liquidia for supply for strategic business reasons, in either case for the supply of PRINT Materials, Liquidia Respiratory Product, Research Products and Inhaled Products for the purposes described above in this Section 9.2, then consistent with GSK's rights as set forth in Section 5.2, Liquidia shall commence a technology transfer to GSK or GSK's Third Party manufacturer of PRINT, PRINT Tooling and any other information and technology reasonably necessary for GSK or GSK's Third Party manufacturer to manufacture and supply such requirements of the PRINT Materials, Liquidia Respiratory Product, Research Products or Inhaled Products. The Parties shall use Commercially Reasonable Efforts to jointly develop and complete a detailed technology transfer project plan within thirty (30) days after GSK's request to Liquidia to commence such technology transfer. Solely in the event the circumstances set forth in Section 9.2(b)(ii) occur, the provisions of Section 10.6 shall apply.

9.3 Manufacturing Technology Transfer. To the extent a technology transfer to GSK or a Third Party contract manufacturer is required pursuant to Sections 9.1 or 9.2 above, then Liquidia shall conduct such technology transfer in accordance with a reasonable plan to be agreed between the Parties, and shall pay for such technology transfer during the agreed upon technology transfer period. Thereafter, GSK shall bear the cost of such technology transfer; provided, that Liquidia has used Commercially Reasonable Efforts to comply with the technology transfer plan within the agreed period of time; and provided further that if Liquidia does not use Commercially Reasonable Efforts to comply with the technology transfer plan within the agreed period of time, then Liquidia shall bear the costs of the remaining period of time applicable to such technology transfer. Notwithstanding the foregoing, if GSK has determined that it or a Third Party will be responsible for manufacture as set forth in Sections 9.2 and 5.2(c)(ii)(C)(2), then GSK shall bear the cost of such technology transfer, subject to

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Liquidia's use of Commercially Reasonable Efforts to comply with the agreed technology transfer plan. Liquidia's obligation to transfer PRINT or PRINT Tooling (as applicable) shall only apply in the event that GSK has the right to make or have made the Research Materials, Liquidia Respiratory Product, Research Product and/or Inhaled Product using PRINT or PRINT Tooling under this Article 9 and Section 5.2.

9.4 U.S. Manufacturing Waiver. Promptly upon GSK's request, Liquidia shall use reasonable efforts to obtain a waiver to any requirement that Research Products or Products must be manufactured in the U.S. (including the requirements set forth in 35 U.S.C. §200 et seq. (the **"Bayh-Dole Act"**)) or to satisfy an applicable exception to such requirement. Liquidia will provide GSK with copies of all documents to be submitted in seeking such waiver in sufficient time for GSK to review and comment on the documents before their submission, and Liquidia shall incorporate GSK's reasonable comments and recommendations into such document. If such waiver is not obtained reasonably promptly after GSK's request, and such delay was not the result of GSK's failure to perform in accordance with this Section 9.4, then any such delay in commencing clinical trials shall not be deemed to be a Development Delay in accordance with Section 6.2.

9.5 No Product Formulation. Nothing in this Agreement shall be construed as requiring Liquidia to conduct, or requiring GSK to engage Liquidia to conduct, activities that may be necessary or useful to formulate Research Products into Inhaled Products suitable for sale by GSK, its Affiliates or sublicensees.

ARTICLE 10
COMPENSATION

10.1 Upfront Payment and Equity Investment.

(a) In partial consideration of the rights granted to GSK hereunder, GSK shall pay to Liquidia a one-time, non-refundable and non-creditable upfront payment of four million Dollars ($4,000,000). Such payment shall be payable by wire transfer of immediately available funds in accordance with wire transfer instructions of Liquidia provided in writing to GSK on or prior to the Effective Date. Such payment shall be made within ten (10) Business Days after GSK's receipt of an invoice from Liquidia on or after the Effective Date, which invoice shall be sent in PDF format to [***] with a copy to [***] and the Alliance Manager.

(b) Concurrent with the execution of this Agreement and the Vaccine Collaboration Agreement, in partial consideration of the rights granted to GSK under this Agreement, GSK and Liquidia shall enter into the Stock Purchase Agreement attached hereto as Exhibit D, pursuant to which GSK shall purchase from Liquidia and Liquidia shall sell to GSK 4,765,248 shares of Liquidia's Series C-1 preferred stock at a purchase price of $0.79744 per share for a total investment of $3,799,999.37.

10.2 Reimbursement of Collaboration Costs. Within fifteen (15) days after the end of each calendar quarter during the Inhaled Collaboration Term, Liquidia shall submit to GSK a reasonably detailed report and any additional documentation reasonably requested by GSK, setting forth all Collaboration Costs actually incurred by Liquidia in the conduct of the Inhaled Program in accordance with the Inhaled Plan and associated budget during such calendar quarter.

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GSK shall reimburse Liquidia for the Collaboration Costs incurred as set forth in such report; provided, that any Collaboration Costs incurred in excess of [***] percent ([***]%) of the budgeted Collaboration Costs for the applicable quarter shall be borne by Liquidia unless such overage was approved in

advance by the JSC. Notwithstanding the foregoing, any Collaboration Costs that are incurred by Liquidia as a result of Liquidia's failure to use Commercially Reasonable Efforts or due to Liquidia's negligence, whether or not such Collaboration Costs are in excess of [***] percent ([***]%) of the budget for the applicable quarter, shall be borne entirely by Liquidia. GSK shall reimburse such Collaboration Costs within sixty (60) days after receipt of an invoice from Liquidia, which invoice shall be sent in PDF format to [***] with a copy to [***] (or such other email address(es) as may be notified to Liquidia by GSK). For the avoidance of doubt, the Collaboration Costs reimbursed to Liquidia by GSK shall be used by Liquidia solely to cover the costs of the conduct of the Inhaled Plan that are incurred after the Effective Date.

10.3 Option Exercise Fees.

(a) Within sixty (60) days following receipt of an invoice from Liquidia following Liquidia's receipt of the Respiratory Option Notice from GSK as set forth in Section 4.1(c), which invoice shall be sent in PDF format to [***] with a copy to [***] (or such other email address(es) as may be notified to Liquidia by GSK), GSK shall pay to Liquidia a one-time, non-refundable and non-creditable option exercise fee of ten million Dollars ($10,000,000).

(b) Within sixty (60) days following receipt of an invoice from Liquidia following Liquidia's receipt of the Inhaled Option Notice from GSK as set forth in Section 4.2(b), which invoice shall be sent in PDF format to [***] with a copy to [***] (or such other email address(es) as may be notified to Liquidia by GSK), GSK shall pay to Liquidia a one-time, non-refundable and non-creditable option exercise fee of fifteen million Dollars ($15,000,000).

10.4 Milestone Payments for Inhaled Field and Liquidia Respiratory Field.

(a) If GSK exercises the Liquidia Respiratory Option and/or the Inhaled Option, then subject to the remainder of this Section 10.4, GSK shall make each of the following non-refundable, non-creditable milestone payments to Liquidia, for the Liquidia Respiratory Product, and on a Research Product-by-Research Product basis or on an Inhaled Product-by-Inhaled Product basis, as applicable, upon achievement of the applicable development milestone events:

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	Milestone Payments for Liquidia Respiratory Product, Research Products and Inhaled Products	
Milestone Events	**For New Therapeutic Products**	**For Rescue Therapeutic Products and Liquidia Respiratory Product**
First dosing of First Patient in Phase I Clinical Trial	$ 3,000,000	$ [***]
First dosing of First Patient in Phase II Clinical Trial	$ [***]	$ [***]
First dosing of First Patient in Phase III Clinical Trial	$ [***]	$ [***]
NDA/BLA approval by FDA with an Acceptable Label	$ [***]	$ [***]
MAA approval by EMA with an Acceptable Label, including price and reimbursement approval at a level acceptable to GSK, in the first three (3) of five (5) Major EU Markets	$ [***]	$ [***]
Total Milestone Payments for the Liquidia Respiratory Product or per Research Product or Inhaled Product, as applicable (subject to Section 10.4(b) below):	$ [***]	$ [***]

(b) The milestone payments set forth above in Section 10.4(a) shall be payable on the Liquidia Respiratory Product and the first [***] Research Products or Inhaled Products, as applicable (regardless of whether the Research Product or Inhaled Product is a New Therapeutic Product or Rescue Therapeutic Product) that achieve such milestone events; provided that the milestone payments for the [***] Research Products or Inhaled Products, as applicable, shall be reduced to [***]percent ([***]%) of the amounts set forth above in Section 10.4(a). In addition, in the event of a Development Delay and the subsequent conversion of GSK's Inhaled License to non-exclusive license in accordance with Section 6.2, the milestone payment for milestone events achieved by any Research Product or Inhaled Product, as applicable, after such conversion shall be reduced to [***] percent ([***]%) of the amount otherwise due. For clarity, no milestone payment shall be due for the [***] and subsequent Research Products or Inhaled Products, as applicable, which achieve the milestone events set forth above. For illustrative purposes only, if the Inhaled License is converted to non-exclusive and the fourth Research Product that is a New Therapeutic Product achieves First dosing in First Patient in Phase III Clinical Trial, then the amount due for such achievement shall be $[***].

(c) If a particular milestone is achieved by GSK, its Affiliates or sublicensees with respect to the Liquidia Respiratory Product or a particular Research Product or Inhaled Product, as applicable (regardless of whether the Research Product or Inhaled Product is New Therapeutic Product or Rescue Therapeutic Product), then all prior milestones for the Liquidia Respiratory Product, Research Product or Inhaled Product, as applicable, shall be deemed achieved upon achievement of that particular milestone. For the avoidance of doubt, GSK will not be responsible for payment of milestones achieved by the Liquidia Respiratory Product unless and until GSK exercises the Liquidia Respiratory Option, and only with respect to those achieved by GSK, its Affiliates or sublicensees after exercise of the Liquidia Respiratory Option. In addition, and subject to the foregoing sentence, all milestones shall be deemed achieved with respect to the Liquidia Respiratory Product or a particular Research Product or Inhaled Product upon the First Commercial Sale of the Liquidia Respiratory Product or the corresponding Inhaled

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Product. For clarity, "prior" refers to the relative order in the table above, e.g., "First dosing of First Patient in Phase I Clinical Trial" being "prior" to "First dosing of First Patient in Phase II Clinical Trial".

(d) GSK shall notify Liquidia in writing promptly, but in no event later than ten (10) Business Days after each achievement of each milestone set forth above in this Section 10.4 that triggers a payment. GSK shall pay all such milestone payments due in Dollars within sixty (60) days after GSK's receipt of an invoice from Liquidia following the achievement of the corresponding milestone event. Such invoice shall be sent in PDF format to GSK's Alliance Manager and [***] with a copy to [***] (or such other e-mail address(es) as may be notified to Liquidia by GSK). GSK shall notify Liquidia of any deficiency in any invoice delivered to GSK hereunder promptly, and in no event more than seven (7) Business Days following GSK's receipt thereof.

10.5 Royalties.

(a) Royalty Rates

(i) Liquidia Respiratory Product. If GSK exercises the Liquidia Respiratory Option, then subject to Section 10.5(c) below, GSK shall pay Liquidia non-refundable, non-creditable incremental royalties on worldwide annual Net Sales of the Liquidia Respiratory Product as calculated by multiplying the applicable royalty rate by the corresponding amount of incremental Net Sales of the Liquidia Respiratory Product in each calendar year as follows:

Annual Net Sales of the Liquidia Respiratory Product	Royalty Rate
For that portion less than or equal to $[***]	[***]%
For that portion greater than $[***]but less than or equal to $[***]	[***]%
For that portion greater than $[***]	[***]%

(ii) Inhaled Products. If GSK exercises the Inhaled Option, then subject to Section 10.5(c) below, GSK shall pay Liquidia non-refundable, non-creditable incremental royalties on worldwide annual Net Sales on each Inhaled Product, as calculated by multiplying the applicable royalty rate by the corresponding amount of incremental Net Sales of such Inhaled Product in each calendar year as follows:

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	Royalty Rate on an Inhaled Product-by-Inhaled Product basis		
Annual Net Sales of Each Inhaled Product	For the first [***] Inhaled Products that achieve First Commercial Sale	For the [***] Inhaled Products that achieve First Commercial Sale	For [***] and all subsequent Inhaled Products that achieve First Commercial Sale
For that portion less than or equal to $[***]	[***]%	[***]%	[***]%
For that portion greater than $[***]but less than or equal to $[***]	[***]%	[***]%	[***]%
For that portion greater than $[***]	[***]%	[***]%	[***]%

For example, if worldwide annual Net Sales of the first Inhaled Product are $800,000,000, then the royalties payable with respect to such annual Net Sales, subject to adjustment as set forth below, would be [***].

Notwithstanding the foregoing, in the event of a Development Delay and the subsequent conversion of GSK's Inhaled License to non-exclusive as set forth in Section 6.2, the royalty rates for Inhaled Products sold after such conversion shall be reduced to [***] percent ([***]%) of the rate set forth in the table above. By way of illustration only, if a Development Delay occurs and GSK subsequently achieves First Commercial Sale for the first Inhaled Product, then the royalty rates payable on Net Sales of such Inhaled Product would be [***] percent ([***]%) for Net Sales less than or equal to $[***] and [***] percent ([***]%) for Net Sales in excess of $[***], in either case, subject to the reductions set forth below in Section 10.5(c).

(b) Royalty Term. Royalties set forth in Section 10.5(a) shall be paid in accordance with the terms of Section 10.5 (including Section 10.5(c) below), on a country-by-country basis and Product-by-Product basis, commencing on First Commercial Sale of the Product, as the case may be, in such country until the latest of: (i) the expiration of the last-to-expire Valid Claim in such country that, but for the Inhaled License granted in Section 5.2(b) or the Liquidia Respiratory License granted in Section 5.2(a), would be infringed by the sale or approved method of use of the Product; (ii) the expiration of Regulatory Exclusivity in such country covering the Product; and (iii) the tenth (10^{th}) anniversary of the First Commercial Sale of the Product in such country, but in no event later than December 31, 2045 (the "**Royalty Term**").

(c) Royalty Reductions.

(i) Know-How Royalty. On a country-by-country and Product-by-Product basis, if the Product is generating Net Sales in a country during the applicable Royalty Term and the sale or approved method of use of the Product does not infringe any Valid Claim in

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such country, then the royalty rate applicable to Net Sales of the Product in such country shall be reduced to [***]percent ([***]%) of the royalty rate set forth above in Section 10.5(a) (as reduced by conversion to a non-exclusive license pursuant to a Development Delay, if applicable).

(ii) Generic Competition. On a country-by-country and Product-by-Product basis, if the Product is generating Net Sales in a country during the applicable Royalty Term and a Generic Product with respect to the Product is sold in such country, then the royalty rate applicable to Net Sales of the Product in such country shall be reduced to [***]percent ([***]%) of the royalty rate set forth above in Section 10.5(a) (as reduced by conversion to a non-exclusive license pursuant to a Development Delay, if applicable), commencing with the Net Sales made after the first calendar quarter during which the unit volume of all such Generic Products sold by Third Parties in such country exceeds, in each month during such calendar quarter, [***]percent ([***]%) of the combined unit volume of the Product and such Generic Product sold in such month in such country. All such determinations of unit volume shall be based on a mutually acceptable calculation method and using market share data provided by a reputable and mutually agreed upon provider, such as IMS Health.

(iii) Third Party Royalties.

(A) First Product. If it is necessary for GSK, as determined by GSK in its sole discretion, to obtain a license from a Third Party to avoid infringing a Third Party Patent in connection with practicing PRINT or using the PRINT Material contained in the first Product sold under this Agreement, then GSK shall have the right to deduct from the royalties otherwise due to Liquidia on the sale of such Product an amount equal to [***] percent ([***]%) of the royalty payment paid by GSK to such Third Party pursuant to such license on account of such sale; provided, that GSK shall not be permitted to deduct royalties payable to Third Parties in an amount that would reduce the royalty rate payable to Liquidia by more than [***] percent ([***]%), subject always to Section 10.5(c)(iv) below. GSK shall have the right to carry forward against royalties payable on the sale of such first product in a subsequent calendar quarter any Third Party payment reduction that GSK is unable to take on such first product due to such limitation, subject to the limitation set forth in the proviso in the preceding sentence.

(B) Subsequent Products. If it is necessary for GSK, as determined by GSK in its sole discretion, to obtain a license from a Third Party to avoid infringing a Third Party Patent in connection with the sale of Products sold under this Agreement (other than the first Product for which deduction of Third Party royalties are governed by Section 10.5(c)(iii)(A)), then GSK shall have the right to deduct from the royalties otherwise due to Liquidia on the sale of such Product an amount equal to [***]percent ([***]%) of the royalty payment paid by GSK to such Third Party pursuant to such license on account of such sale; provided, that GSK shall not be permitted to deduct royalties payable to Third Parties in an amount that would reduce the royalty rate payable to Liquidia by more than [***] percent ([***]%), subject always to Section 10.5(c)(iv) below. GSK shall have the right to carry forward against royalties payable on the sale of such product in a subsequent calendar quarter any Third Party payment reduction that GSK is unable to take on such product due to such limitation, subject to the limitation set forth in the proviso in the preceding sentence.

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For illustrative purposes only of Section 10.5(c)(iii)(B) above, if GSK owes Liquidia a royalty rate of [***] percent ([***]%) of Net Sales on a Product, and also owes a royalty rate of [***] percent ([***]%) of Net Sales to a Third Party, then GSK shall be entitled to deduct from royalties payable to Liquidia an amount equal to [***] percent ([***]%) of Net Sales. If GSK owes Liquidia a royalty rate of [***] percent ([***]%) of Net Sales on a Product, and also owes a royalty rate of [***] percent ([***]%) of Net Sales to a Third Party, then GSK shall be entitled to deduct from royalties payable to Liquidia an amount equal to [***] percent ([***]%) of Net Sales.

(C) Combination Product Limitations. With respect to any Products that are Combinations and that are subject to the provisions of Section 10.5(c)(iii)(B) (i.e. not the first Product launched under this Agreement), GSK shall not deduct royalties due to Third Parties with respect to active ingredients comprising the Combination that (1) are not associated with or contained in the PRINT Material, and (2) have been taken into account in the calculation of Net Sales in accordance with Section 1.109.

(iv) Limitations on Royalty Reductions. Notwithstanding the foregoing, the operation of Sections 10.5(c)(i), (ii) and (iii), individually or in combination, shall not reduce any royalty rate due under Section 10.5(a) (as reduced by conversion to a non-exclusive license pursuant to a Development Delay, if applicable) to less than [***] percent ([***]%) (or [***] percent ([***]%) in the event of conversion to a non-exclusive license pursuant to a Development Delay).

(d) Royalty Reports and Payments. Within sixty (60) days following the end of each calendar quarter, commencing with the calendar quarter in which the First Commercial Sale of any Product is made anywhere in the world, GSK shall provide Liquidia with a report setting forth the Net Sales of each Product on a country-by-country basis and the royalties due on such Products. Concurrent with the delivery of the applicable quarterly report, GSK shall pay in Dollars all amounts due to Liquidia pursuant to Section 10.5 with respect to Net Sales by GSK, its Affiliates and their respective sublicensees for such calendar quarter.

10.6 COGS Payments. If the circumstances set forth in Section 9.2(b)(ii) occur, and GSK or a Third Party is responsible for manufacture of PRINT Materials, Liquidia Respiratory Product, Research Products or Inhaled Products, then GSK would make payments to Liquidia on a quarterly basis, concurrent with the royalty report and payment described in Section 10.5(d), in an amount equal to [***]percent ([***]%) of GSK's COGS solely related to the manufacture of PRINT Materials for the preceding calendar quarter. Such payments shall be made to Liquidia on an Inhaled Product-by-Inhaled Product basis, on up to [***] ([***]) Inhaled Products, and shall commence with the first full calendar quarter in which there are Net Sales of the first Inhaled Product, and quarterly thereafter for a period of [***] ([***]) years.

10.7 Blocked Currency. If at any time legal restrictions within any country in which there are Net Sales of a Product prevent the conversion of the local currency and such currency cannot be removed from such country such that prompt remittance by GSK of any royalties owed in respect of Net Sales in such country is prevented, then GSK shall make payment to Liquidia in the equivalent amount in Dollars.

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10.8 Currency; Exchange. All payments under this Agreement shall be made in Dollars by wire transfer of immediately available funds into an account designated in writing by Liquidia. With respect to sales of Products invoiced in Dollars, the Net Sales and the amounts due hereunder will be expressed in Dollars. With respect to sales of Products invoiced in a currency other than Dollars, the Net Sales and amounts due hereunder will be reported in Dollars, calculated using the average exchange rates as calculated and utilized by GSK's group reporting system and published accounts for its own purposes. As of the Effective Date, the method utilized by GSK's group reporting system uses spot exchange rates sourced from Reuters/Bloomberg.

10.9 Late Payments. Any undisputed amount owed by GSK to Liquidia under this Agreement that is not paid on or before the due date shall bear interest at two (2) percentage points over the overnight LIBOR rate in effect on the due date. Where the late payment is caused by Liquidia, including for reasons such as failure to communicate in a timely manner changes to bank details, or failure to respond to communications from GSK regarding the interpretation or dispute of the terms of such payment, then no interest will be payable by GSK.

10.10 Records; Audits. GSK and its Affiliates and sublicensees will maintain complete and accurate records in sufficient detail to permit Liquidia to confirm the accuracy of the calculation of royalties due hereunder. Upon ninety (90) days prior written notice, GSK shall make such records available for examination during regular business hours for a period of three (3) years from the end of the calendar year to which they pertain by an independent certified public accountant selected by Liquidia and reasonably acceptable to GSK, for the sole purpose of verifying the accuracy of the financial reports furnished by GSK pursuant to this Agreement. Such audit right shall not be exercised by Liquidia more than once in any calendar year and the records for a twelve (12) month period may not be audited more than once. All records made available for audit shall be deemed to be Confidential Information of GSK. The results of each audit, if any, shall be binding on both Parties absent manifest error or fraud. Any amounts shown to be owed but unpaid shall be paid within sixty (60) days from receipt by GSK of an invoice from Liquidia based on the accountant's report, plus interest (as set forth in Section 10.9) from the original due date. Liquidia shall bear the full cost of such audit unless such audit discloses an underpayment by GSK of more than five percent (5%) of the amount due, in which case GSK shall bear the full cost of such audit.

10.11 Taxes.

(a) Taxes on Income. Each Party shall be solely responsible for the payment of all taxes imposed on its share of income arising directly or indirectly from the efforts of the Parties under this Agreement.

(b) Cooperation. The Parties agree to cooperate with one another and use reasonable efforts to reduce or eliminate tax withholding or similar obligations in respect of royalties, milestone payments, and other payments made by GSK to Liquidia under this Agreement. To the extent GSK is required to deduct and withhold taxes on any payment to Liquidia, GSK shall pay the amounts of such taxes to the proper Governmental Authority in a timely manner and promptly transmit to Liquidia an official tax certificate or other evidence of such withholding sufficient to enable Liquidia to claim such payment of taxes. Liquidia shall

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provide GSK any tax forms that may be reasonably necessary in order for GSK not to withhold tax or to withhold tax at a reduced rate under an applicable bilateral income tax treaty. Each Party shall provide the other with reasonable assistance to enable the recovery, as permitted by applicable Laws, of withholding taxes, value added taxes, or similar obligations resulting from payments made under this Agreement, such recovery to be for the benefit of the Party bearing such withholding tax or value added tax. GSK shall require its sublicensees to cooperate with Liquidia in a manner consistent with this Section 10.11(b).

(c) Taxes Resulting From GSK Action. If GSK is required to make a payment to Liquidia that is subject to a deduction or withholding of tax, then (i) if such withholding or deduction obligation arises as a result of any action by GSK, including any assignment or sublicense or transfer of GSK's obligations, or any failure on the part of GSK to comply with applicable Laws or filing or record retention requirements, that has the effect of modifying the tax treatment of the Parties hereto (a "**GSK Withholding Tax Action**"), then the sum payable by GSK (in respect of which such deduction or withholding is required to be made) shall be increased to the extent necessary to ensure that Liquidia receives a sum equal to the sum which it would have received had no such GSK Withholding Tax Action occurred, and (ii) the sum payable by GSK shall be made to Liquidia after deduction of the amount required to be so deducted or withheld, which deducted or withheld amount shall be remitted to the proper Governmental Authority in accordance with applicable Laws. If Liquidia is able to obtain credit for any taxes for which an additional payment is made by GSK under Section 10.11(c) ("**Creditable Taxes**") against any tax liability otherwise payable by Liquidia in the year in which the GSK Withholding Tax Action takes place or any preceding years, Liquidia shall reimburse to GSK an amount equivalent to the Creditable Taxes (but only to the extent of additional amounts received by Liquidia pursuant to Section 10.11(c)). Liquidia shall provide GSK with evidence as GSK may reasonably request to review the amount of any Creditable Taxes; provided, that Creditable Taxes shall be reasonably determined by Liquidia in good faith and may take into account all other tax attributes and items of Liquidia prior to giving effect to any credit for withholding taxes with respect to payments hereunder. If, with respect to the payments contemplated by this Section 10.11 any taxing authority disallows all or a portion of a claimed credit then GSK will pay Liquidia an amount equal to the disallowed claimed credit.

ARTICLE 11
INTELLECTUAL PROPERTY MATTERS

11.1 Ownership of Existing Intellectual Property. Except as set forth below in Section 11.3 and except as such rights are expressly licensed by one Party to the other Party hereunder, Liquidia shall retain all of its rights, title and interest in and to the Liquidia Technology existing prior to the Effective Date or arising outside of this Agreement and the Vaccine Collaboration Agreement, and GSK shall retain all of its rights, title and interest in and to the GSK Technology existing prior to the Effective Date or arising outside of this Agreement and the Vaccine Collaboration Agreement, and in the case of PRINT Improvements, arising under this Agreement after the Inhaled Collaboration Term.

11.2 Disclosure of Know-How. Each Party shall promptly disclose to the other Party all Joint Inhaled Collaboration Know-How and Liquidia Collaboration Know-How, GSK shall promptly disclose to Liquidia all PRINT Improvements, and Liquidia shall promptly disclose to

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GSK all GSK Collaboration Know-How, including any invention disclosures, or other similar documents, submitted to it by its employees, agents or independent contractors describing the inventions to the extent necessary or useful for the preparation, filing and maintenance of any Joint Inhaled Collaboration Patent, Liquidia Patent or GSK Patent hereunder.

11.3 Ownership of Collaboration Inventions. Notwithstanding Section 11.1, the ownership of all Know-How made by either Party (whether alone or jointly with the other Party) during the performance of its obligations under the Inhaled Plan (the "**Collaboration Know-How**") is as follows:

(a) By Liquidia. Liquidia shall solely own all Collaboration Know-How that solely relates to PRINT and PRINT Tooling ("**Liquidia Collaboration Know-How**"). To the extent any Liquidia Collaboration Know-How is made by GSK, whether solely or jointly with Liquidia, then upon Liquidia's request GSK will transfer and assign, and hereby transfers and assigns to Liquidia, without additional consideration, all of GSK's interest in such Liquidia Collaboration Know-How, which transfer and assignment Liquidia hereby accepts. GSK shall execute and deliver to Liquidia a deed(s) of such assignment, in a mutually agreeable form and will take whatever actions reasonably necessary, including the appointment of Liquidia as its attorney in fact solely to make such assignment, to effect such assignment. For clarity, Liquidia Collaboration Know-How shall include Collaboration Know-How that has general applicability to the function of PRINT, such as improvements to the operational aspects of manufacturing PRINT Materials using PRINT, but does not include Collaboration Know-How relating to General Biological Effects.

(b) By GSK. GSK shall solely own all Collaboration Know-How that solely relates to GSK Materials ("**GSK Collaboration Know-How**"). To the extent any GSK Collaboration Know-How is made by Liquidia, whether solely or jointly with GSK, then upon GSK's request Liquidia will transfer and assign and hereby transfers and assigns to GSK, without additional consideration, all of Liquidia's interest in such GSK Collaboration Know-How, which transfer and assignment GSK hereby accepts. Liquidia shall execute and deliver to GSK a deed(s) of such assignment, in a mutually agreeable form and will take whatever actions reasonably necessary, including the appointment of GSK as its attorney in fact solely to make such assignment, to effect such assignment.

(c) Joint Ownership. Any Collaboration Know-How that is not included in either Liquidia Collaboration Know-How or GSK Collaboration Know-How shall be jointly owned by the Parties (**"Joint Inhaled Collaboration Know-How"**). To the extent any Joint Inhaled Collaboration Know-How is made solely by a Party, such Party hereby transfers and assigns to the other Party, without additional consideration, one undivided half of such Party's interest in such Joint Inhaled Collaboration Know-How, which transfer and assignment the other Party hereby accepts. Each Party shall execute and deliver to the other Party a deed(s) of such assignment, in a mutually agreeable form and will take whatever actions reasonably necessary (including the appointment of the other Party as its attorney in fact solely to make such assignment) to effect such assignment. For clarity, Joint Inhaled Collaboration Know-How shall include Collaboration Know-How that relates to General Biological Effects, and Collaboration Know-How that relates to the use of the combination of the PRINT Materials and GSK Materials; provided, that nothing herein shall be construed as requiring GSK to provide, or grant

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any rights to Liquidia to, any GSK Materials for purposes of enabling Liquidia's practice of the Joint Inhaled Collaboration Know-How except as may be required to conduct its activities under the Inhaled Plan. Subject to the terms of this Agreement, each Party shall be entitled to practice and exploit the Joint Inhaled Collaboration Know-How without the duty of accounting or seeking consent from the other Party.

11.4 Use and Disclosure of Joint Inhaled Collaboration Know-How.

(a) Subject to Sections 11.4(b) and 11.4(c) below and the Parties' rights and obligations to prepare, file, prosecute and maintain Joint Inhaled Collaboration Patents, GSK Patents or Liquidia Patents hereunder, neither Party shall disclose to, or use with any Third Party (other than as otherwise permitted in this Agreement in connection with each Party's rights and obligations) (i) any Joint Inhaled Collaboration Know-How resulting from the Inhaled Plan before the exercise or expiration of the Inhaled Option; or (ii) any Joint Vaccine Collaboration Know-How resulting from the Vaccine Plan before exercise or expiration of the Vaccine Option under the Vaccine Collaboration Agreement. For clarity, (1) each Party shall have the right to use Joint Inhaled Collaboration Know-How for internal research purposes during the Inhaled Collaboration Term, (2) subject to Section 11.4(b) below, neither Party shall have the right to grant non-exclusive or exclusive licenses to any Third Party for any reason to its interests in the Joint Inhaled Collaboration Know-How during the Inhaled Collaboration Term, and (3) each Party may use (A) Joint Inhaled Collaboration Know-How to perform its obligations under the Vaccine Plan and (B) Joint Vaccine Collaboration Know-How to perform its obligations under the Inhaled Plan.

(b) Liquidia shall have the right to use Joint Inhaled Collaboration Know-How and to disclose Joint Inhaled Collaboration Know-How to Third Parties at any time (provided that any Third Party receiving Joint Inhaled Collaboration Know-How shall be bound by obligations of confidentiality and non-use similar to those contained herein): (i) for the furtherance of its obligations under the BMGF Letter Agreement and the Research Collaboration Agreement between Liquidia and PATH Vaccine Solution ("**PVS**"), dated November 1, 2011 (the "**PVS Agreement**"), as such obligations exist on the Effective Date; (ii) for future agreements with government and Non-Governmental Organizations for purposes of grant funding; provided that no such agreement shall affect the rights granted or obligated to GSK under this Agreement (subject to Section 5.7(b) of the Vaccine Collaboration Agreement); (iii) subject to GSK's right of first negotiation set forth in Section 4.3, for uses other than any vaccines applications and the Inhaled Field to the extent the Joint Collaboration Inhaled Know-How is independently related to General Biological Effects and has broad applicability to therapeutic uses other than vaccines applications or the Inhaled Field as determined by the JPC; and (iv) for internal research purposes with respect to Excluded Applications, Liquidia Retained Product, Liquidia Respiratory Product and other Liquidia products outside the Inhaled Field or Co-Delivery Vaccine Field so long as such product research and development is not conducted with a Third Party.

(c) GSK shall have the right to use any Joint Inhaled Collaboration Know-How or Joint Vaccine Collaboration Know-How in support of the prosecution and maintenance of (i) Patents claiming the Joint Inhaled Collaboration Know-How (the **"Joint Inhaled Collaboration Patents"**) or (ii) Joint Vaccine Collaboration Patents. Notwithstanding Section

11.4(b), Liquidia shall have the right, subject to GSK's consent (not to be unreasonably withheld or delayed) to use any Joint Inhaled Collaboration Know-How or Joint Vaccine Collaboration Know-How in support of the prosecution and maintenance of any Liquidia Patents; provided that if GSK so consents, then Liquidia shall be deemed to have granted and hereby grants to GSK a non-exclusive, royalty free, perpetual, worldwide license, with the right to grant sublicenses through multiple tiers, under any Liquidia Patent, the prosecution of which was supported by Joint Collaboration Inhaled Know-How or Joint Vaccine Collaboration Know-How, including all foreign counterparts of such Liquidia Patent, for use in the Inhaled Field and Co-Delivery Vaccine Field. For clarity, Liquidia shall have the right to use any Liquidia Know-How and Liquidia Collaboration Know-How in support of the prosecution and maintenance of any Liquidia Patents without giving rise to any such license to GSK.

11.5 Prosecution of Patents.

(a) Liquidia Patents.

(i) Subject to the oversight of the JPC, Liquidia shall have the first right to prepare, file, prosecute and maintain all Liquidia Patents at its sole cost and expense. Liquidia shall provide GSK, for its review and comment, with drafts of any material filings or responses to be made to any patent authority with respect to Liquidia Patents at least thirty (30) days in advance of intended submission or as soon as possible if Liquidia has less than thirty (30) days to make such submission, and shall provide GSK with copies of material filings with and communication from patent authorities with respect to Liquidia Patents. Liquidia shall reasonably consider incorporating GSK's comments thereto. Liquidia shall respond to all reasonable requests of GSK for additional Know-How with respect to all such prosecution and maintenance efforts.

(ii) If Liquidia decides to cease the prosecution or maintenance of any claim in a Liquidia Patent, it shall notify GSK in writing sufficiently in advance so that GSK may, at its discretion, assume the responsibility for the prosecution or maintenance of such Liquidia Patent, at GSK's cost and expense. GSK shall notify Liquidia of its decision to assume the responsibility of such prosecution and/or maintenance within thirty (30) days of Liquidia's notice to cease such activities. If, within such time, Liquidia has not received notice of GSK's decision to assume prosecution and maintenance Liquidia shall be free to cease such prosecution and maintenance.

(b) Joint Inhaled Collaboration Patents.

(i) Subject to the oversight of the JPC, GSK shall have the first right to prepare, file, prosecute and maintain any Joint Inhaled Collaboration Patents, at GSK's cost and expense; provided that GSK may credit one half (1/2) of the reasonable cost and expense incurred in connection with the preparation, filing, prosecution and maintenance of any Joint Inhaled Collaboration Patent against any payment due to Liquidia under Section 10.3, 10.4, 10.5, or 10.6. GSK shall provide Liquidia, for its review and comment, with drafts of any material filings or responses to be made to any patent authority with respect to Joint Inhaled Collaboration Patents at least thirty (30) days in advance of intended submission, or as soon as possible if GSK has less than thirty (30) days to make such submission, and shall provide

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Liquidia with copies of material filings with and communication from patent authorities with respect to Joint Inhaled Collaboration Patents. Liquidia shall provide comments in due time before the submission date (taking into account the time difference between EST, GMT or CET time zones). GSK shall respond to all reasonable requests of Liquidia for additional Know-How with respect to all such prosecution and maintenance efforts. GSK shall reasonably consider incorporating Liquidia's comments thereto.

(ii) If GSK decides to cease the prosecution or maintenance of any Joint Inhaled Collaboration Patent, it shall notify Liquidia in writing sufficiently in advance so that Liquidia may, at its discretion, assume the responsibility for the prosecution or maintenance of such Joint Inhaled Collaboration Patent, at Liquidia's cost and expense. Liquidia shall notify GSK of its decision to assume the responsibility of such prosecution and/or maintenance within thirty (30) days of GSK's notice to cease such activities. If, within such time, GSK has not received notice of Liquidia's decision to assume prosecution and maintenance, GSK shall be free to cease such prosecution and maintenance.

(c) GSK Patents. GSK shall have the sole and exclusive right to prepare, file, prosecute and maintain GSK Patents.

(d) Cooperation. Each Party shall provide the other Party all reasonable assistance and cooperation, at the prosecuting Party's request, in the patent prosecution efforts provided above in this Section 11.5, including providing any necessary powers of attorney and executing any other required documents or instruments for such prosecution.

11.6 Enforcement of Patents.

(a) Product Infringement. If either Party becomes aware of (i) any existing or threatened infringement or misappropriation by a Third Party of any Joint Inhaled Collaboration Know-How or Joint Inhaled Collaboration Patents, or any Liquidia Patents or Liquidia Know-How, which infringement or misappropriation of such Liquidia Patents or Liquidia Know-How adversely affects or is reasonably expected to adversely affect any Research Product or Product, or (ii) the submission by any Third Party of an application to the FDA, in accordance with the Hatch-Waxman Act or the Biologics Price Competition and Innovation Act of 2009, for approval of a product that such Third Party claims to be equivalent to, or biosimilar or interchangeable with a Product (in either case of (i) or (ii), a **"Product Infringement"**), then it shall promptly notify the other Party in writing and the Parties will consult with each other regarding any actions to be taken with respect to such Product Infringement.

(b) Liquidia Patents.

(i) Except as set forth below in subsection (ii), Liquidia shall have the sole and exclusive right, but not the obligation, to bring an appropriate suit or other action (an **"Action"**) against any person or entity engaged in such Product Infringement of the Liquidia Patents.

(ii) After the First Commercial Sale of a Product, if the only Patents covering or claiming the applicable Product are the Liquidia Patents that are the subject of the

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Product Infringement, then GSK shall have the first right, but not the obligation, to bring an Action against any person or entity engaged in such Product Infringement of the Liquidia Patents. If GSK fails to commence such an Action to enforce the applicable Liquidia Patent or to settle or otherwise secure the abatement of such Product Infringement within fourteen (14) days after its receipt or delivery of notice under Section 11.6(a), then Liquidia shall have the right, but not the obligation, to commence an Action to enforce the applicable Liquidia Patent, in which case GSK shall take reasonably appropriate action to enable Liquidia to commence and/or settle such Action.

(iii) The Party bringing the Action (the **"Enforcing Party"**) shall keep the other Party regularly informed of the status and progress of such enforcement efforts and shall reasonably consider the other Party's comments on any such efforts. The non-Enforcing Party shall provide to the Enforcing Party reasonable assistance in such enforcement pursuant to this Section 11.6(b), at the Enforcing Party's reasonable request and expense, including joining the Action as a party plaintiff if required by applicable Laws to pursue such Action.

(iv) Notwithstanding the provisions of 11.6(b)(ii) and (iii) above, if there is a Change of Control of Liquidia and subsequently a Product Infringement occurs with respect to a Product for which the only Patents covering or claiming the applicable Product are the Liquidia Patents that are the subject of the Product Infringement, then GSK and the Acquiror shall discuss whether GSK shall control such Action in accordance with Sections 11.6(b)(ii) and (iii) or whether GSK and the Acquiror shall negotiate a common interest agreement as described below. If the Parties agree to enter into a common interest agreement, then they shall negotiate the terms thereof in good faith as quickly as possible and in any event in a manner that will not prejudice the Action, which terms shall include, *inter alia*, selection of counsel, litigation and technology support services related to the Action, settlement of the Action, and sharing of costs of counsel and litigation and technology support services. GSK and the Acquiror shall reasonably consider the engagement of GSK's preferred legal providers and litigation and technology support services, as well as the advantages to each of GSK and the Acquiror entering into direct retention agreements with such legal counsel. For the avoidance of doubt, if the Acquiror elects not to participate in the Action or negotiate the terms of a common interest agreement, then GSK shall have full control as set forth above under 11.6(b)(ii) and (iii).

(c) Joint Inhaled Collaboration Patents.

(i) GSK shall have the first right, but not the obligation, to bring an Action against any person or entity engaged in a Product Infringement of the Joint Inhaled Collaboration Patents. GSK shall keep Liquidia regularly informed of the status and progress of such enforcement efforts and shall reasonably consider Liquidia's comments on any such efforts. Liquidia shall provide to GSK reasonable assistance in such enforcement pursuant to this Section 11.6(c), at GSK's request and expense, including joining such Action as a party plaintiff if required by applicable Laws to pursue such Action. Liquidia shall be entitled to separate representation in such matter by counsel of its own choice and at its own expense.

(ii) GSK shall have a period of ninety (90) days after its receipt or delivery of notice under Section 11.6(a) to elect to so enforce the Joint Inhaled Collaboration Patents against Product Infringement or to settle or otherwise secure the abatement of such

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Product Infringement. If GSK fails to commence an Action to enforce the applicable Joint Inhaled Collaboration Patents or to settle or otherwise secure the abatement of such Product Infringement within such period, then Liquidia shall have the right, but not the obligation, to commence an Action to enforce such Joint Inhaled Collaboration Patents at its own cost and expense. GSK shall take reasonably appropriate actions to enable Liquidia to commence an Action as set forth in the preceding sentence.

(iii) A settlement or consent judgment or other voluntary final disposition of an Action under this Section 11.6(c) may be entered into without the consent of the non-Enforcing Party; provided, that any such settlement, consent judgment or other disposition of any Action by the Enforcing Party under this Section 11.6(c) shall not, without the consent of the non-Enforcing Party, (a) impose any liability or obligation on such non-Enforcing Party, (b) include the grant of any license, covenant or other rights to any Third Party that would conflict with or reduce the scope of the subject matter included under the exclusive licenses granted to such non-Enforcing Party under this Agreement, or (c) conflict with or reduce the scope of the subject matter claimed in any Patent owned (solely or jointly, including Joint Inhaled Collaboration Patents) by the non-Enforcing Party.

(d) Expenses and Recoveries. The Enforcing Party bringing an Action under Section 11.6(b) or 11.6(c) shall be solely responsible for any expenses incurred by such Party as a result of such Action. If such Party recovers monetary damages in such Action, such recovery shall be allocated first to the reimbursement of any expenses incurred by the Parties in such litigation, and any remaining amounts shall be allocated as follows: (i) regardless of which Party is the Enforcing Party, any remaining amounts that represent loss of Net Sales resulting from the Product Infringement shall be included in Net Sales for the relevant Product and subject to the royalty payment by GSK to Liquidia pursuant to Section 10.5, and (ii) all other remaining amounts (including treble damages and punitive damages) shall be shared equally by GSK and Liquidia; provided, that if GSK fails to commence an Action as described in Section 11.6(b)(ii) or 11.6(c)(ii) above and Liquidia subsequently becomes the Enforcing Party, then the remaining amounts described in this Section 11.6(d)(ii) shall be retained by Liquidia.

(e) Other Infringement.

(i) Liquidia shall have the sole and exclusive right to bring an Action against any person or entity engaged in any and all infringement of any Liquidia Patents other than a Product Infringement, in its sole discretion, and shall bear all related expenses and retain all related recoveries.

(ii) GSK shall have the sole and exclusive right to bring an Action against any person or entity engaged in any and all infringement of any GSK Patents, in its sole discretion, and shall bear all related expenses and retain all related recoveries.

11.7 Patents Licensed From UNC. With respect to Liquidia Patents that are Controlled by Liquidia as a result of its exclusive license to such Liquidia Patents under the UNC License Agreement, and for which Liquidia has the right to direct UNC's prosecution thereof under Article 8 of the UNC License Agreement, Liquidia shall cause UNC to file, prosecute, and maintain such Liquidia Patents as reasonably requested by GSK via the JPC in each mutually

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agreed country in the Territory, Liquidia's agreement not to be unreasonably withheld. Liquidia shall promptly furnish to GSK upon receipt from UNC or have furnished directly to GSK from UNC copies of all patents, patent applications, substantive patent office actions, and substantive responses received or filed in connection with such patents and patent applications. Liquidia shall cause UNC to reasonably consider and incorporate all input, comments and suggestions of GSK via the JPC on all such patent applications and communications with patent offices, provided that such requests and comments by GSK shall not trigger the license described in Section 11.4(c). Liquidia shall promptly provide notice to GSK as to all matters that come to its attention that may materially affect the preparation, filing, prosecution or maintenance of any such Liquidia Patents by UNC.

11.8 Infringement of Third Party Rights. Subject to Article 13, if any Research Product or Product used or sold by GSK, its Affiliates or sublicensees becomes the subject of a Third Party's claim or assertion of infringement of a Patent of such Third Party with respect to the GSK Materials comprising such Research Product or Product and not the PRINT Materials in such Research Product or Product, then the Party that becomes aware of such claim or assertion shall promptly notify the other Party and GSK shall be solely responsible for the defense of any such infringement claims, at GSK's cost and expense. Subject to Article 13, if any Research Product or Product used or sold by GSK, its Affiliates or sublicensees becomes the subject of any such claim or assertion of infringement of a Third Party patent with respect to the PRINT Materials used in the Research Product or Product, then the Parties shall agree on and enter into a "common interest agreement" wherein the Parties agree to their shared, mutual interest in the outcome of such potential dispute, and thereafter, the Parties shall promptly meet to consider the claim or assertion and the appropriate course of action, including which Party will have responsibility for the defense of such claim and bear the costs thereof.

11.9 Trademarks. GSK shall have the right to brand the Products using trademarks and trade names it determines appropriate for the Products in its sole discretion, which may vary by country or within a country ("**Product Marks**"); provided, that GSK shall not, and shall ensure that its Affiliates and sublicensees will not make any use of the trademarks or house marks of Liquidia (including Liquidia's corporate name) or any trademark confusingly similar thereto. GSK shall own all rights in the Product Marks and shall register and maintain, at its own cost and expense, the Product Marks in the countries and regions that it determines reasonably necessary. For the avoidance of doubt, Liquidia shall not, and shall ensure that its Affiliates and sublicensees will not make any use of the Product Marks, or any trademarks or house marks of GSK or any of its Affiliates (including GSK's corporate name) or any trademark confusingly similar thereto.

ARTICLE 12
REPRESENTATIONS AND WARRANTIES; COVENANTS

12.1 Mutual Representations and Warranties. Each Party hereby represents and warrants to the other Party as follows:

(a) Corporate Existence. As of the Effective Date, it is a company or corporation duly organized, validly existing, and in good standing under the Laws of the jurisdiction in which it is incorporated.

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(b) Corporate Power, Authority and Binding Agreement. As of the Effective Date, (i) it has the corporate power and authority and the legal right to enter into this Agreement and perform its obligations hereunder; (ii) it has taken all necessary corporate action on its part required to authorize the execution and delivery of this Agreement and the performance of its obligations hereunder; and (iii) this Agreement has been duly executed and delivered on behalf of such Party, and constitutes a legal, valid, and binding obligation of such Party that is enforceable against it in accordance with its terms.

12.2 Additional Representations and Warranties of Liquidia. Liquidia represents and warrants to GSK as follows, as of the Effective Date:

(a) It Controls PRINT, PRINT Tooling, PRINT Materials and the Liquidia Technology, and has all rights necessary under the Liquidia Technology to grant the options, licenses and other rights to GSK as purported to be granted pursuant to this Agreement;

(b) It Controls, or has the right to Control, any Patents or Know-How arising from activities conducted by UNC or the Consultant under the UNC Research Agreement, the UNC Material Transfer Agreement and the Consulting Agreement in accordance with the terms of such agreements;

(c) It has not received any written notice from any Third Party asserting or alleging that the development or practice of the Liquidia Technology infringes or misappropriates the intellectual property rights of such Third Party, and to its knowledge, GSK's practice of the rights granted to GSK hereunder do not infringe the intellectual property rights of any Third Party;

(d) There are no pending, and to Liquidia's knowledge, no threatened, adverse actions, suits or proceedings against Liquidia involving any Liquidia Technology;

(e) Except as set forth on Exhibit B, it has not granted any right or license to any Third Party relating to any of the Liquidia Know-How or Liquidia Patents that would conflict with any of the rights or licenses granted to GSK hereunder and prohibit GSK from exercising such rights;

(f) It has disclosed to GSK all material information received by Liquidia concerning the institution of any interference, opposition, reexamination, reissue, revocation, or nullification or any official proceeding involving any Liquidia Patent anywhere in the Territory (for the avoidance of doubt, the phrase "official proceeding" as used herein is not intended to mean ordinary prosecution and maintenance activities);

(g) It has provided GSK with a complete and accurate copy of the UNC License Agreement and UNC Research Agreement, as each such agreement is in effect as of the Effective Date, and Liquidia is not aware of any current material breach of the UNC License Agreement or UNC Research Agreement that would give UNC the right to terminate the same;

(h) To its knowledge, it is not in violation of any Anti-Corruption Laws;

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(i) It acknowledges receipt of GSK's "Prevention of Corruption — Third Party Guidelines" which are attached hereto as Exhibit E, and agrees to perform its obligations under the Agreement in accordance with the principles set out therein;

(j) It acknowledges that, in entering into this Agreement, GSK has relied upon information supplied by Liquidia and information which Liquidia has caused to be supplied to GSK by Liquidia's agents and/or representatives regarding PRINT and PRINT Materials, pursuant to the Confidentiality Agreement (all of such information being hereinafter referred to collectively as **"Product Information"**). Liquidia represents and warrants to GSK that, to Liquidia's knowledge, the Product Information provided to GSK in connection with this Agreement is accurate in all material respects. Liquidia further warrants and represents to GSK that it has not, as of the Effective Date, intentionally omitted to furnish GSK with any material information known to Liquidia concerning PRINT or PRINT Materials or the transactions contemplated by this Agreement, which would reasonably be considered to have a materially adverse effect on PRINT, PRINT Materials or the performance of the Inhaled Plan; and

(k) UNC has reviewed the terms of this Agreement and has consented to any inconsistencies between the terms, conditions and limitations of this Agreement and the UNC License Agreement.

12.3 Liquidia Covenant; Mutual Covenants.

(a) No Debarment. In the course of the research or development of the Research Products, each Party shall not use any employee or consultant who has been debarred by any Regulatory Authority, or, to such Party's knowledge, is the subject of debarment proceedings by a Regulatory Authority. Each Party shall notify the other Party promptly upon becoming aware that any of its employees or consultants has been debarred or is the subject of debarment proceedings by any Regulatory Authority.

(b) Compliance. Each Party and its Affiliates shall comply in all material respects with all applicable Laws in the development and commercialization of Research Products and Products and performance of its obligations under this Agreement, including the statutes, regulations and written directives of the FDA, the EMA and any other applicable Regulatory Authority, the FD&C Act, the Prescription Drug Marketing Act, the Federal Health Care Programs Anti-Kickback Law, 42 U.S.C. 1320a-7b(b), the statutes, regulations and written directives of Medicare, Medicaid and all other health care programs, as defined in 42 U.S.C. § 1320a-7b(f), and Anti-Corruption Laws, each as may be amended from time to time.

12.4 Disclaimer. Each Party understands that PRINT Tooling, PRINT, the PRINT Materials, GSK Materials, Research Materials and Research Products are the subject of ongoing research and development and that neither Party can assure the safety or usefulness of PRINT Tooling, PRINT, PRINT Materials, GSK Materials, Research Materials or Research Products. In addition, Liquidia makes no warranties except as set forth in this Article 12 concerning the Liquidia Technology. EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, EACH PARTY SPECIFICALLY DISCLAIMS ANY GUARANTEE THAT THE INHALED PLAN WILL BE SUCCESSFUL, IN WHOLE OR IN PART. EXCEPT AS EXPRESSLY STATED IN THIS AGREEMENT, NO REPRESENTATIONS OR WARRANTIES

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WHATSOEVER, WHETHER EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT, OR NON-MISAPPROPRIATION OF THIRD PARTY INTELLECTUAL PROPERTY RIGHTS, ARE MADE OR GIVEN BY OR ON BEHALF OF A PARTY, AND ALL REPRESENTATIONS AND WARRANTIES, WHETHER ARISING BY OPERATION OF LAW OR OTHERWISE, ARE HEREBY EXPRESSLY EXCLUDED.

ARTICLE 13
INDEMNIFICATION

13.1 Indemnification by Liquidia. Liquidia shall defend, indemnify, and hold GSK and its Affiliates and their respective officers, directors, employees, and agents (the **"GSK Indemnitees"**) harmless from and against any and all liabilities, damages, losses, costs and expenses including the reasonable fees of attorneys (collectively, **"Losses"**), arising out of or resulting from any Third Party suits, claims, actions, proceedings or demands (**"Claims"**) to the extent that such Claims arise out of, are based on, or result from: (a) the breach of any of Liquidia's obligations under this Agreement,

including Liquidia's representations and warranties set forth herein; (b) the willful misconduct or grossly negligent acts of Liquidia, its Affiliates, sublicensees, subcontractors, or the officers, directors, employees, or agents of Liquidia or its Affiliates; (c) the conduct of Liquidia's activities under the Inhaled Plan, and/or the failure to manufacture and supply PRINT Materials and Research Materials in accordance with the terms of this Agreement as required for the conduct of the Inhaled Plan, but only to the extent such activities are not performed by GSK's personnel as described in Section 3.4; (d) the research or development of the Liquidia Respiratory Product conducted negligently by or on behalf of Liquidia (excluding any activities conducted by GSK in the event GSK contributes to the research or development of Liquidia Respiratory Product pursuant to Section 4.1(a)); (e) any inconsistencies between the terms, conditions and limitations of the UNC License Agreement and this Agreement which cause GSK's inability to comply with the provisions of the UNC License Agreement as required therein; or (f) any breach by Liquidia or its Affiliates of the UNC License Agreement or UNC Research Agreement, in each case, not attributable to an act or omission of GSK or its Affiliates, or their respective subcontractors or sublicensees. The foregoing indemnity obligation shall not apply to the extent that (i) the GSK Indemnitees fail to comply with the indemnification procedures set forth in Section 13.3 and Liquidia's defense of the relevant Claims is prejudiced by such failure, or (ii) any Claim that arises from, is based on, or results from any activity set forth in Section 13.2 for which GSK is obligated to indemnify the Liquidia Indemnitees. Indemnification related to the manufacture and supply of clinical supply of PRINT Materials and Research Products shall be provided for in the Development Supply Agreement described in Section 9.1(b) and indemnification related to the manufacture and supply of commercial supply of PRINT Materials and Research Products shall be provided for in the Commercial Supply Agreement, if any, described in Section 9.2.

13.2 Indemnification by GSK. GSK shall defend, indemnify, and hold Liquidia and its Affiliates and their respective officers, directors, employees, and agents (the "**Liquidia Indemnitees**") harmless from and against any and all Losses arising out of or resulting from any Claims to the extent that such Claims arise out of, are based on, or result from: (a) the research, use, development, manufacture, commercialization, handling, storage or other disposition of

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PRINT Materials, Research Materials, Liquidia Respiratory Product, Research Products and Inhaled Products by or on behalf of GSK or its Affiliates or its or their sublicensees or subcontractors (other than by Liquidia pursuant to the Inhaled Plan), including Claims based upon product liability and intellectual property infringement, but excluding (i) use of PRINT and PRINT Tooling as transferred to GSK or its Third Party contract manufacturer and used in accordance with written instructions provided by Liquidia and (ii) Liquidia's use of the PRINT Improvements that are licensed by GSK to Liquidia; (b) the breach of any of GSK's obligations under this Agreement, including GSK's representations and warranties set forth herein; (c) the willful misconduct or grossly negligent acts of GSK, its Affiliates or its or their sublicensees or subcontractors, or the officers, directors, employees, or agents of GSK or its Affiliates; or (d) the use by Liquidia of GSK Materials in accordance with handling and other written instructions provided by GSK in performing Liquidia's activities under the Inhaled Plan and the negligent conduct of GSK's activities under the Inhaled Plan. The foregoing indemnity obligation shall not apply to the extent that (i) the Liquidia Indemnitees fail to comply with the indemnification procedures set forth in Section 13.3 and GSK's defense of the relevant Claims is prejudiced by such failure, or (ii) any Claim arises from, is based on, or results from any activity set forth in Section 13.1 for which Liquidia is obligated to indemnify the GSK Indemnitees. Indemnification related to the manufacture and supply of clinical supply of PRINT Materials and Research Products shall be provided for in the Development Supply Agreement described in Section 9.1(b) and indemnification related to the manufacture and supply of commercial supply of PRINT Materials and Research Products shall be provided for in the Commercial Supply Agreement, if any, described in Section 9.2.

13.3 Indemnification Procedures. The Party claiming indemnity under this Article 13 (the "**Indemnified Party**") shall give written notice to the Party from whom indemnity is being sought (the "**Indemnifying Party**") promptly after learning of such Claim. The Indemnified Party shall provide the Indemnifying Party with reasonable assistance, at the Indemnifying Party's expense, in connection with the defense of the Claim for which indemnity is being sought. The Indemnified Party may participate in and monitor such defense with counsel of its own choosing at its sole expense; provided, that the Indemnifying Party shall have the right to assume and conduct the defense of the Claim with counsel of its choice. The Indemnifying Party shall not settle any Claim without the prior written consent of the Indemnified Party, not to be unreasonably withheld. So long as the Indemnifying Party is actively defending the Claim in good faith, the Indemnified Party shall not settle or compromise any such Claim without the prior written consent of the Indemnifying Party. If the Indemnifying Party does not assume and conduct the defense of the Claim as provided above, (a) the Indemnified Party may defend against, consent to the entry of any judgment, or enter into any settlement with respect to such Claim in any manner the Indemnified Party may deem reasonably appropriate (and the Indemnified Party need not consult with, or obtain any consent from, the Indemnifying Party in connection therewith), and (b) the Indemnifying Party shall remain responsible to indemnify the Indemnified Party as provided in this Article 13.

13.4 Limitation of Liability. NEITHER PARTY SHALL BE LIABLE TO THE OTHER FOR ANY SPECIAL, CONSEQUENTIAL, INCIDENTAL, PUNITIVE, OR INDIRECT DAMAGES (INCLUDING ANY LOSS OF PROFITS, EARNINGS, GOODWILL, SAVINGS OR BUSINESS SUFFERED BY LIQUIDIA OR GSK) ARISING FROM OR

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RELATING TO ANY BREACH OF THIS AGREEMENT, REGARDLESS OF ANY NOTICE OF THE POSSIBILITY OF SUCH DAMAGES. NOTWITHSTANDING THE FOREGOING, NOTHING IN THIS SECTION 13.4 IS INTENDED TO OR SHALL LIMIT OR RESTRICT THE INDEMNIFICATION RIGHTS OR OBLIGATIONS OF ANY PARTY UNDER SECTION 13.1 OR 13.2, OR DAMAGES AVAILABLE FOR A PARTY'S BREACH OF CONFIDENTIALITY OBLIGATIONS IN ARTICLE 14.

13.5 Insurance. Each Party shall procure and maintain insurance, or in GSK's case, self-insure, consistent with normal business practices of prudent companies similarly situated at all times during the Term of this Agreement. It is understood that such insurance shall not be construed to create a limit of either Party's liability with respect to its indemnification obligations under this Article 13. Each Party shall provide the other Party with written evidence of such insurance upon request. Each Party shall provide the other Party with written notice at least thirty (30) days prior to the cancellation, non-renewal or material change in such insurance.

ARTICLE 14
CONFIDENTIALITY

14.1 Confidentiality. Each Party agrees that, during the Term and for a period of five (5) years thereafter, it shall keep confidential and shall not publish or otherwise disclose and shall not use for any purpose other than as provided for in this Agreement (which includes the exercise of any rights or the performance of any obligations hereunder) any Confidential Information furnished to it by the other Party pursuant to this Agreement, except to the extent expressly authorized by this Agreement or otherwise agreed in writing by the Parties. The foregoing confidentiality and non-use obligations shall not apply to any portion of the other Party's Confidential Information that the receiving Party can demonstrate by competent written proof:

(a) was already known to the receiving Party or its Affiliate, other than under an obligation of confidentiality, at the time of disclosure by the other Party;

(b) was generally available to the public or otherwise part of the public domain at the time of its disclosure to the receiving Party;

(c) became generally available to the public or otherwise part of the public domain after its disclosure and other than through any act or omission of the receiving Party in breach of this Agreement;

(d) was disclosed to the receiving Party or its Affiliate on a non-confidential basis by a Third Party who has a legal right to make such disclosure and who did not obtain such information directly or indirectly from the other Party; or

(e) was independently discovered or developed by the receiving Party or its Affiliate without access to or aid, application or use of the other Party's Confidential Information, as evidenced by written records made contemporaneous with such discovery or development and kept in the ordinary course of business, or other similar documentary proof of actual knowledge by the receiving Party.

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Notwithstanding the definition of "Confidential Information" in Article 1, all Collaboration Know-How, whether generated by one or both Parties, shall be owned by a Party or the Parties in accordance with Section 11.3. In addition, the exceptions set forth in subsections (a) and (e) shall not apply to Collaboration Know-How, which shall be deemed Confidential Information of the Party that owns such Collaboration Know-How regardless of whether such Collaboration Know-How satisfies the criteria set forth in one or both subsections.

14.2 Authorized Disclosure. Notwithstanding the obligations set forth in Section 14.1, a Party may disclose the other Party's Confidential Information to the extent:

(a) such disclosure is reasonably necessary (i) for the filing or prosecuting Patents as contemplated by this Agreement; (ii) to comply with the requirements of Regulatory Authorities with respect to obtaining and maintaining Regulatory Approval of a Product; or (iii) for prosecuting or defending litigation as contemplated by this Agreement;

(b) such disclosure is reasonably necessary to its employees, agents, consultants, contractors, licensees or sublicensees on a need-to-know basis for the sole purpose of performing its obligations or exercising its rights under this Agreement; provided that in each case, the disclosees are bound by written obligations of confidentiality and non-use consistent with those contained in this Agreement;

(c) such disclosure (including the terms of this Agreement) is reasonably necessary to any bona fide potential or actual investor, acquiror, merger partner, licensee or other financial or commercial partner for the sole purpose of evaluating an actual or potential investment, acquisition or other business relationship; provided that in connection with such disclosure, such Party shall inform each Third Party to whom Confidential Information is disclosed of the confidential nature of such Confidential Information and cause each such Third Party to treat such Confidential Information as confidential; or

(d) such disclosure is reasonably necessary to comply with applicable Laws, including regulations promulgated by applicable security exchanges, court order, administrative subpoena or order.

Notwithstanding the foregoing, in the event a Party is required to make a disclosure of the other Party's Confidential Information pursuant to Section 14.2(a) or 14.2(d), such Party shall promptly notify the other Party such required disclosure and shall use reasonable efforts to obtain, or to assist the other Party in obtaining, a protective order preventing or limiting the required disclosure.

14.3 Technical Publication. Neither Party may publish peer reviewed manuscripts, or give other forms of public disclosure such as abstracts and presentations, of results of studies carried out under the Inhaled Plan, without the opportunity for prior review by the other Party, except to the extent required by applicable Laws. A Party seeking publication shall provide the other Party the opportunity to review and comment on any proposed publication that contains the results of studies carried out under the Inhaled Plan at least sixty (60) days prior to its intended submission for publication; provided, that Liquidia shall not have the right to publish any information or material relating to Inhaled Products, Research Products, Research Materials,

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GSK Materials, or any results of studies carried out by or on behalf of GSK outside the scope of the Inhaled Plan, without GSK's prior consent. The other Party shall provide the Party seeking publication with its comments in writing, if any, within thirty (30) days after receipt of such proposed publication. The Party seeking publication shall consider in good faith any comments thereto provided by the other Party and shall comply with the other Party's request to

remove any and all of such other Party's Confidential Information from the proposed publication. In addition, the Party seeking publication shall delay the submission for a period up to sixty (60) days after the other Party's receipt of the proposed publication in the event that the other Party can demonstrate reasonable need for such delay, including the preparation and filing of a patent application. If the other Party fails to provide its comments to the Party seeking publication within such thirty (30) day period, such other Party shall be deemed not to have any comments, and the Party seeking publication shall be free to publish in accordance with this Section 14.3 after the sixty (60) day period has elapsed. The Party seeking publication shall provide the other Party a copy of the manuscript at the time of the submission. Each Party agrees to acknowledge the contributions of the other Party and its employees in all publications as scientifically appropriate. For the avoidance of doubt, GSK shall not be required to seek Liquidia's review of publications that contain results of studies carried out by or on behalf of GSK outside the scope of the Inhaled Plan. In addition to the foregoing, to the extent Liquidia receives a proposed public disclosure or publication from UNC in accordance with Section 2.2 of the UNC License Agreement or Section 6 of the UNC Research Agreement, then Liquidia shall ensure that GSK is given the opportunity to review and possibly delay such public disclosure or publication in order to protect Liquidia Know-How that may be disclosed in such public disclosure or publication in accordance with the terms of the UNC License Agreement.

14.4 Publicity; Terms of this Agreement.

(a) The Parties agree that the terms of this Agreement are the Confidential Information of both Parties, subject to the special authorized disclosure provisions set forth in this Section 14.4.

(b) On or after the Effective Date, Liquidia shall have the right to issue a public announcement of the execution of this Agreement, in the form agreed by the Parties as of the Effective Date.

(c) Except for the public announcement described in Section 14.4(b), neither Party nor such Party's Affiliates will make any public announcements, press releases, regulatory filing or other public disclosures, written or oral, whether to the public, the press, stockholders or otherwise, concerning this Agreement or the terms or the subject matter hereof, the performance hereof or the Parties' activities hereunder, or any results or data arising hereunder (a **"Public Statement"**), except: (i) with the prior written consent of the other Party (such consent not to be unreasonably delayed or withheld but may be conditional upon certain restrictions as to the content and/or distribution of such Public Statement to ensure consistency with GSK's policies, including GSK's standards for Scientific Engagement); or (ii) for such Public Statements, as in the opinion of the counsel for the Party intending to make such Public Statement, are required to comply with applicable Laws (including the regulations of any stock exchange) (a **"Legal Requirement"**) and which in any event contain only the minimum disclosure necessary to comply with the relevant Legal Requirement.

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(d) Each Party agrees to provide the other Party with a copy of any proposed Public Statement as soon as reasonably practicable under the circumstances prior to its scheduled release. Each Party shall provide the other with an advance copy of any such Public Statement at least seven (7) days prior to its scheduled release; provided, that if the Party proposing such Public Statement cannot provide the reviewing Party with seven (7) days notice due to extraordinary circumstances, such Party will use reasonable efforts to provide the reviewing Party with the proposed Public Statement for comment at least forty-eight (48) hours before release. Each Party furthermore shall have the right to review and recommend changes to any such Public Statement and, except as otherwise required by Legal Requirement, the Party whose Public Statement has been reviewed shall remove any Confidential Information of the reviewing Party that the reviewing Party reasonably deems to be inappropriate for disclosure.

(e) In addition to the foregoing each Party agrees to give the other Party a reasonable opportunity (to the extent consistent with Legal Requirements) to review all Public Statements required by Legal Requirements to be filed with the SEC or similar body prior to submission of such filings, and will give due consideration to any reasonable comments by the non-filing Party relating to such filing, including the provisions of this Agreement for which confidential treatment should be sought.

14.5 Clinical Trial Register. Notwithstanding anything in this Article 14, GSK shall have the right to publish summaries of data and results from any human clinical trials conducted under this Agreement on its clinical trials registry or on a government-sponsored database such as www.clinicaltrials.gov or other publicly available websites such as www.clinicalstudyresults.org, without requiring the consent of Liquidia. The Parties shall reasonably cooperate if needed in order to ensure the publication of any such summaries of human clinical trials data and results as required on GSK's clinical trial registry and any government-sponsored database such as clinicaltrials.gov or other publicly available websites such as www.clinicalstudyresults.org.

14.6 Equitable Relief. Each Party acknowledges that its breach of this Article 14 may cause irreparable harm to the other Party, which cannot be reasonably or adequately compensated in monetary damages. Therefore, each Party agrees that the other Party shall be entitled, in addition to any other remedies it may have under this Agreement or otherwise, to seek preliminary and permanent injunctive and other equitable relief to prevent or curtail any actual or threatened breach of the obligations relating to Confidential Information set forth in this Article 14 by the other Party.

ARTICLE 15
TERM AND TERMINATION

15.1 Term. This Agreement shall become effective on the Effective Date and, unless earlier terminated pursuant to this Article 15, shall remain in effect (the "**Term**"):

(a) in the Liquidia Respiratory Field, (i) if GSK does not timely exercise the Liquidia Respiratory Option, then until the expiration of the Liquidia Respiratory Option; or (ii) if GSK timely exercises the Liquidia Respiratory Option, on a country-by-country basis, until the expiration of the Royalty Term of such Liquidia Respiratory Product in such country; and

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(b) in the Inhaled Field, (i) if GSK does not timely exercise the Inhaled Option, then until the expiration of the Inhaled Option; or (ii) if GSK timely exercises the Inhaled Option, on an Inhaled Product-by-Inhaled Product and country-by-country basis, until the expiration of the Royalty Term of such Inhaled Product in such country.

For clarity, if GSK does not timely exercise any option, this Agreement shall expire in its entirety upon the expiration of the last-to-expire option. In addition, in the event the Inhaled Option or Liquidia Respiratory Option are exercised under this Agreement, then upon expiration of all applicable Royalty Terms for Inhaled Products and the Liquidia Respiratory Product, as applicable, GSK shall have a perpetual, fully-paid, royalty-free right and license, with the right to grant sublicenses, under the Liquidia Technology, Joint Inhaled Collaboration Know-How, Joint Inhaled Collaboration Patents and Liquidia's interest in and to the Joint Vaccine Collaboration Know-How and Joint Vaccine Collaboration Patents to make, have made, use, sell, offer to sell and import such Inhaled Product or Liquidia Respiratory Product, as the case may be, in the applicable Exercised Field.

15.2 Termination by GSK for Convenience. GSK may terminate this Agreement in its entirety, on a Research Product-by-Research Product basis, or on a Product-by-Product basis for any reason upon at least one hundred twenty (120) days prior written notice to Liquidia.

15.3 Termination for Breach. Each Party shall have the right to terminate this Agreement in its entirety, on a Research Product-by-Research Product basis, or on a Product-by-Product basis immediately upon written notice to the other Party if the other Party materially breaches its obligations under this Agreement and, after receiving written notice identifying such material breach in reasonable detail, fails to cure such material breach within ninety (90) days from the date of such notice (or within thirty (30) days from the date of such notice in the event such material breach is solely based on the breaching Party's failure to pay any amounts due hereunder). For clarity, a material breach in connection with the Liquidia Respiratory Product or an Inhaled Product, respectively, will not be considered a material breach in connection with an Inhaled Product or the Liquidia Respiratory Product, respectively, and further, a material breach under the Vaccine Collaboration Agreement or this Agreement, respectively, will not affect or be deemed to be a material breach of this Agreement or the Vaccine Collaboration Agreement, respectively. For clarity, failure of the Parties to achieve the objectives and goals of the Inhaled Plan due primarily to technical or scientific infeasibility, for example, with respect to creating the PRINT Materials or Research Materials contemplated under the Inhaled Plan will not be deemed to be a material breach of the Agreement by either Party under this Section 15.3; provided, that such exclusion from breach does not include failure of either Party to diligently perform their obligations as described in this Agreement and under the Inhaled Plan.

15.4 Termination for Bankruptcy. Each Party shall have the right to terminate this Agreement in its entirety immediately upon written notice to the other Party upon such other Party's filing or institution of bankruptcy, reorganization, liquidation or receivership proceedings, or upon an assignment of a substantial portion of the assets for the benefit of creditors by such other Party; provided however that in the case of involuntary bankruptcy proceeding such right to terminate shall only become effective if such other Party consents to the involuntary bankruptcy or such proceeding is not dismissed within sixty (60) days after its filing. In connection therewith, all rights and licenses granted under or pursuant to any section of this

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Agreement are and shall otherwise be deemed to be for purposes of Section 365(n) of Title 11, United States Code (the **"Bankruptcy Code"**) licenses of rights to "intellectual property" as defined in Section 101(56) of the Bankruptcy Code. The Parties shall retain and may fully exercise all of their respective rights and elections under the Bankruptcy Code. Upon the bankruptcy of any Party, the non-bankrupt Party shall further be entitled to a complete duplicate of, or complete access to, any such intellectual property, and such, if not already in its possession, shall be promptly delivered to the non-bankrupt Party, unless the bankrupt Party elects to continue, and continues, to perform all of its obligations under this Agreement.

15.5 Effects of Termination. Upon any termination or expiration of this Agreement, each Party shall have the right to practice and/or license its interest in the Joint Inhaled Collaboration Know-How as joint owner, without any requirement of gaining the consent of, or accounting to, the other Party.

(a) The following consequences shall apply only in the event of termination by GSK pursuant to Section 15.2 or by Liquidia pursuant to Section 15.3 or expiration of this Agreement pursuant to Section 15.1(a)(i) or 15.1(b)(i), as applicable:

(i) Liquidia Respiratory Product. The following shall apply with respect to termination by GSK pursuant to Section 15.2 or by Liquidia pursuant to Section 15.3, in either case, in connection with termination of the Agreement solely with respect to the Liquidia Respiratory Product or the Agreement in its entirety. If GSK has exercised the Liquidia Respiratory Option prior to such termination, then GSK's Liquidia Respiratory License shall terminate and the following shall apply:

(A) License. GSK hereby grants to Liquidia, effective only upon such termination and subject to any terms of Third Party agreements, an exclusive, worldwide, sublicenseable (through multiple tiers) license under the GSK Respiratory Technology to make, have made, use, import, offer for sale and sell the Liquidia Respiratory Product. For the purpose of this Section 15.5(a)(i), "**GSK Respiratory Technology**" means Know-How Controlled by GSK that is solely related to the Liquidia Respiratory Product and used by or on behalf of GSK in connection with GSK's development or commercialization of the Liquidia Respiratory Product as of the effective date of termination, and Patents claiming such Know-How including any Know-How or Patents Controlled by GSK that claim or cover any technology including devices or delivery technologies. In addition, the license granted by GSK to Liquidia under PRINT Improvements under Section 5.5(b) shall continue and shall be expanded to include uses in the Liquidia Respiratory Field.

(B) Royalties. Liquidia shall pay to GSK royalty payments (the **"Reversion Royalties"**) on net sales of the Liquidia Respiratory Product in the Territory at a royalty rate of [***] percent ([***]%) for each development stage (set forth in the table below) that GSK has advanced the Liquidia Respiratory Product from the time of the exercise of the Liquidia Respiratory Option to the effective date of termination. By way of example, if GSK exercises the Liquidia Respiratory Option before the first dosing of the Liquidia Respiratory Product in the first Phase I Clinical Trial, and this Agreement is terminated after the first dosing of the Liquidia Respiratory Product in the first Phase II Clinical Trial but prior to first dosing of the Liquidia Respiratory Product in the first Phase III Clinical Trial, then GSK has advanced the

Liquidia Respiratory Product by two (2) stages and the royalty rate shall be [***] percent ([***]%).

Development stage of Liquidia Respiratory Product

First dosing in the first Phase I Clinical Trial but prior to first dosing in the first Phase II Clinical Trial

First dosing in the first Phase II Clinical Trial but prior to first dosing in the first Phase III Clinical Trial

First dosing in the first Phase III Clinical Trial but prior to first MAA approval in any of the Major EU Markets, United States or Japan with a product label acceptable to Liquidia in its sole discretion

First MAA approval in any of the Major EU Markets, United States or Japan with a product label acceptable to Liquidia in its sole discretion

The Reversion Royalties due to GSK as set forth above with respect to the Liquidia Respiratory Product shall be paid on a country-by-country basis, commencing upon the First Commercial Sale of the Liquidia Respiratory Product in a particular country and expiring upon the date that is ten years after the First Commercial Sale of the Liquidia Respiratory Product in such country. The terms of Sections 10.5(d), 10.7, 10.8, 10.9, 10.10 and 10.11 shall apply *mutatis mutandis* to the payment of such Reversion Royalties to GSK.

(C) Regulatory Materials; Data. To the extent legally permissible, GSK shall transfer and assign to Liquidia, at no cost to Liquidia, all Regulatory Materials and Regulatory Approvals for the Liquidia Respiratory Product, as well as all data from non-clinical and clinical studies conducted by or on behalf of GSK, its Affiliates or sublicensees on the Liquidia Respiratory Product and all pharmacovigilance data (including all adverse event database) on the Liquidia Respiratory Product.

(D) Trademarks. GSK shall transfer and assign to Liquidia, at GSK's expense, all Product Marks for the Liquidia Respiratory Product (excluding any such marks that include, in whole or part, any corporate name or logos of GSK or its Affiliates or sublicensees or any other mark or trade dress that is generally used for or is substantially similar to other products in GSK's portfolio).

(E) Transition Assistance. Upon Liquidia's request, and to the extent permissible, GSK shall assign to Liquidia any sublicenses for the Liquidia Respiratory Product and any agreements or arrangement with Third Party vendors pertaining to the development or manufacture of the Liquidia Respiratory Product, and shall provide reasonable technical assistance in transferring the GSK Respiratory Technology to Liquidia or its designee at costs to be shared equally by GSK and Liquidia.

(F) Clinical Trials. If at the time of such termination, GSK is

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conducting any clinical trials for the Liquidia Respiratory Product, then, at Liquidia's election on a trial-by-trial basis, and in accordance with applicable Laws and GSK's policies applicable to the conduct or stoppage of clinical trials: (A) GSK shall fully cooperate with Liquidia to transfer the conduct of all such clinical trials to Liquidia and Liquidia shall assume any and all liability (including costs) for such clinical trials after the effective date of such termination, except that GSK shall continue to bear all costs and expenses incurred in connection with the conduct of such clinical trial until the earlier of the completion of such trial or thirty (30) days after the effective date of such termination; or (B) GSK shall orderly wind down the conduct of any such clinical trial which is not assumed by Liquidia under clause (A). In each case GSK shall reimburse Liquidia for any non-cancellable and non-refundable out-of-pocket costs Liquidia may incur in connection with the conduct or wind down of all such clinical trials as of the effective date of such termination.

(ii) Inhaled Products. The following shall apply with respect to termination by GSK pursuant to Section 15.2 or by Liquidia pursuant to Section 15.3, in either case, in connection with termination of the Agreement solely on an Inhaled Product-by-Inhaled Product (or Research Product-by-Research Product, as applicable) basis or the Agreement in its entirety. If GSK has exercised the Inhaled Option prior to such termination, then GSK's Inhaled License shall expire with respect to the terminated Inhaled Product (or Research Product, if applicable) and the following shall apply:

(A) Upon Liquidia's request, GSK shall provide Liquidia with copies of Regulatory Materials, pharmacovigilance data and Joint Inhaled Collaboration Know-How not already in Liquidia's possession, related to the PRINT Materials used in connection with the Inhaled Products (or Research Products, as applicable). All such Regulatory Materials, Joint Inhaled Collaboration Know-How and other data may be redacted by GSK with respect to anything contained therein that is related to the GSK Materials. Liquidia shall have the non-exclusive right to use and reference such Regulatory Materials, Know-How and other data. Nothing herein shall be construed as requiring GSK to provide to Liquidia, or grant any rights to Liquidia, to any materials, Know-How, data, information or the like of any kind whatsoever relating to GSK Materials or delivery technologies.

(B) In addition, solely in the case of termination of the Agreement in its entirety, the license granted by GSK to Liquidia under PRINT Improvements under Section 5.5(b) shall continue and shall be expanded to include the Inhaled Field.

(iii) Joint Inhaled Collaboration Patents; Confidential Information. The following shall apply with respect to either (A) termination of the Agreement in its entirety by GSK pursuant to Section 15.2, (B) termination of the Agreement in its entirety by Liquidia pursuant to Section 15.3, or (C) expiration in both the Liquidia Respiratory Field and Inhaled Field pursuant to Sections 15.1(a)(i) and 15.1(b)(i) respectively, and either (X) termination of the Vaccine Collaboration Agreement in its entirety by GSK pursuant to Section 15.2 of the Vaccine Collaboration Agreement, (Y) termination of the Vaccine Collaboration Agreement in its entirety by Liquidia pursuant to Section 15.3 of the Vaccine Collaboration Agreement, or (Z) expiration in the Co-Delivery Vaccine Field pursuant to Section 15.1(a)(i) of the Vaccine Collaboration Agreement: Liquidia shall have the right, but not the obligation, to assume the responsibility for the prosecution and maintenance of Joint Inhaled Collaboration Patents, at Liquidia's cost and

expense. GSK shall provide Liquidia with all assistance and cooperation as reasonably necessary for Liquidia to assume such responsibility, at Liquidia's expense. Thereafter, Liquidia shall provide GSK, for its review and comment, with drafts of any material filings or responses to be made to any patent authority with respect to Joint Inhaled Collaboration Patents at least ten (10) Business Days in advance of intended submission, and shall provide GSK with copies of material filings made with, and communication received from, patent authorities with respect to Joint Inhaled Collaboration Patents. Liquidia shall reasonably consider incorporating GSK's comments thereto. For the avoidance of doubt, each Party shall have the right to practice and/or license the Joint Inhaled Collaboration Know-How as joint owner, without any requirement of gaining the consent of, or accounting to, the other Party and may use it for any purpose. In addition, GSK shall return to Liquidia, and cease using, all Confidential Information of Liquidia.

(b) The following consequences shall apply only in the event of termination by GSK pursuant to Section 15.3:

(i) Termination During Inhaled Collaboration Term. If GSK terminates the Agreement pursuant to Section 15.3 during the Inhaled Collaboration Term, then:

(A) GSK shall retain (1) the license granted in Section 5.1, (2) the right to exercise the Liquidia Respiratory Option, to the extent not exercised as of the date of termination, and the Inhaled Option, pursuant to the terms of this Agreement except that (a) if Liquidia's breach caused a Development Delay, then the period of time during which GSK shall be entitled to exercise the Inhaled Option shall be extended by twelve (12) months, and (b) the option fee payable by GSK pursuant to Section 10.3(b) will be reduced by [***] percent ([***]%), and (3) to the extent that the Liquidia Respiratory Option has been exercised, the Liquidia Respiratory License granted prior to termination of the Agreement shall survive.

(B) Liquidia shall return to GSK, and cease using all Confidential Information of GSK except as required to continue its obligations set forth in this Section 15.5(b)(i).

(C) The JPC and Advisory Council shall continue on the terms provided in this Agreement.

(D) The following payment provisions will apply: GSK shall make milestone payments to Liquidia under Section 10.4(a) at [***] percent ([***]%) of the amounts set forth therein, when and if they become due, and shall pay Liquidia royalties in accordance with Section 10.5.

(E) Liquidia's right to convert the Inhaled License to non-exclusive in the event of a Development Delay shall terminate and be of no further force and effect.

(F) Sections 9.1(a), 9.1(b) and 9.2(a) shall continue to govern the manufacture and supply of PRINT Materials, Research Materials, Liquidia Respiratory Product, Research Products and/or Inhaled Products as set forth therein, including the technology transfer of PRINT and/or PRINT Tooling.

(G) The obligations and limitations applicable to Liquidia set forth in Sections 7.1, 11.4(b) and 4.3 shall survive.

(H) GSK's obligation to use Commercially Reasonable Efforts under Sections 6.2 (as amended by this Section 15.5(b)(i)) and 8.1 shall survive only upon the occurrence of a material breach by Liquidia that is not by its nature curable and is not the result of Liquidia's purposeful or willful acts or omissions. For clarity, GSK's obligation to use Commercially Reasonable Efforts under Sections 6.2 (as amended by this Section 15.5(b)(i)) and 8.1 shall not survive upon the occurrence of a material breach by Liquidia that either (1) is by its nature curable, whether or not the result of Liquidia's purposeful or willful acts or omissions, but that Liquidia does not cure in accordance with Section 15.3, or (2) is not curable, and is the result of Liquidia's purposeful or willful acts or omissions.

(ii) Termination After Exercise of Inhaled Option. If GSK terminates the Agreement pursuant to Section 15.3 after GSK's exercise of the Inhaled Option, then:

(A) GSK shall retain the Inhaled License as provided in this Agreement, subject to the remainder of this Section 15.5(b)(ii).

(B) Liquidia shall return to GSK, and cease using all Confidential Information of GSK except as required to continue its obligations set forth in this Section 15.5(b)(ii).

(C) At GSK's option, the JPC and Advisory Council will continue as provided in this Agreement.

(D) The following payment provisions will apply: GSK shall make milestone payments to Liquidia under Section 10.4(a) at [***] percent ([***]%) of the amounts set forth therein, when and if they become due, and shall pay Liquidia royalties in accordance with Section 10.5.

(E) Liquidia's right to convert the Inhaled License to non-exclusive in the event of a Development Delay shall terminate and be of no further force and effect.

(F) Sections 9.1(b) and 9.2(a) shall continue to govern the manufacture and supply of PRINT Materials, Liquidia Respiratory Product, Research Products and/or Inhaled Products as set forth therein, including the technology transfer of PRINT and/or PRINT Tooling.

(G) The obligations and limitations applicable to Liquidia set forth in Section 7.1 shall survive.

(H) GSK's obligation to use Commercially Reasonable Efforts under Sections 6.2 (as amended by this Section 15.5(b)(i)) and 8.1 shall survive only upon the occurrence of a material breach by Liquidia that is not by its nature curable and is not the result

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of Liquidia's purposeful or willful acts or omissions. For clarity, GSK's obligation to use Commercially Reasonable Efforts under Sections 6.2 (as amended by this Section 15.5(b)(i)) and 8.1 shall not survive upon the occurrence of a material breach by Liquidia that either (1) is by its nature curable, whether or not the result of Liquidia's purposeful or willful acts or omissions, but that Liquidia does not cure in accordance with Section 15.3, or (2) is not curable, and is the result of Liquidia's purposeful or willful acts or omissions.

15.6 Survival. Termination or expiration of this Agreement shall not affect any rights or obligations of the Parties under this Agreement that have accrued prior to the date of termination or expiration. Notwithstanding anything to the contrary, the following provisions shall survive any expiration or termination of this Agreement: Sections 5.3, 5.6, 5.5(b), 7.5 (solely with respect to Product sold under this Agreement prior to the effective date of termination), 10.2 — 10.11 (solely with respect to payments accrued prior to the effective date of termination, and if the Agreement is terminated by GSK pursuant to Section 15.3, payments due to Liquidia after the termination as amended by Section 15.5(b) if applicable), 11.1, 11.3, 11.5(b) (in the event of expiration of the Agreement only), 15.5 (as applicable), and 15.6, and Articles 1, 13, 14, 16, and 17. In addition, Sections 7.2, 7.3, 7.4, 7.5, and 15.3 and 15.5(a) shall survive any termination of this Agreement with respect to any obligations under this Agreement that survive such termination.

ARTICLE 16
DISPUTE RESOLUTION

16.1 Disputes. The Parties recognize that disputes as to certain matters may from time to time arise that relate to either Party's rights and/or obligations hereunder. It is the objective of the Parties to establish procedures to facilitate the resolution of disputes arising under this Agreement in an expedient manner by mutual cooperation. To accomplish this objective, the Parties agree to follow the procedures set forth in this Article 16 to resolve any controversy or claim arising out of, relating to or in connection with any provision of this Agreement, if and when a dispute arises under this Agreement.

16.2 Internal Resolution. With respect to all disputes arising between the Parties under this Agreement, including any alleged breach under this Agreement or any issue relating to the interpretation or application of this Agreement, if the Parties are unable to resolve such dispute within thirty (30) days after such dispute is first identified by either Party in writing to the other, the Parties shall refer such dispute to the Executive Officers of the Parties for attempted resolution by good faith negotiations within thirty (30) days after such notice is received by or referred to the Executive Officers.

16.3 Third Party Mediation. Any dispute remaining unresolved after escalation to the Executive Officers pursuant to Section 16.2 shall first be submitted to mediation in accordance with the Mediation Procedure of the International Institute for Conflict Prevention and Resolution ("**CPR**"). Such mediation shall be attended on behalf of each Party for at least one session by a senior executive with authority to resolve the dispute and shall be held in New York City, New York. Unless otherwise agreed by the Parties, the Parties shall select a mediator from the CPR Panels of Distinguished Neutrals. Notwithstanding the foregoing, each Party has the right to pursue provisional relief from any court, such as attachment, preliminary injunction

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or replevin to avoid irreparable harm, maintain the status quo, or preserve the subject matter of the dispute, prior to the commencement of, or while the Parties are engaged in, the mediation process pursuant to Section 16.5. Any dispute that cannot be resolved by mediation within sixty (60) days of notice by one Party to the other Party of the commencement of the mediation process shall be resolved by arbitration in accordance Section 16.4.

16.4 Dispute Resolution. If the Parties are not able to resolve a dispute referred to them under Section 16.2 and subject to mediation as set forth in Section 16.3, then subject to Section 16.5, such dispute shall be finally resolved by final and binding arbitration conducted in accordance with the terms of this Section 16.4. The arbitration will be held in New York City, New York according to Rules of Arbitration of the International Chamber of Commerce ("**ICC**"). The arbitration will be conducted by a single arbitrator with significant experience in the pharmaceutical industry, unless otherwise agreed by the Parties, appointed by ICC within fifteen (15) days after commencement of the arbitration in accordance with applicable ICC rules. Any arbitration herewith will be conducted in the English language. The arbitrator will be instructed not to award any punitive or special damages and will render a written decision no later than six (6) months following the selection of the arbitrator, including a basis for any damages awarded and a statement of how the damages were calculated. Any award will be promptly paid in Dollars free of any tax, deduction or offset. Each Party agrees to abide by the award rendered in any arbitration conducted pursuant to this Section 16.4. With respect to money damages, nothing contained herein will be construed to permit the arbitrator or any court or any other forum to award punitive or exemplary damages. Each Party will pay its legal fees and costs related to the arbitration (including witness and expert fees); provided, that the arbitrator shall be authorized to determine whether a Party is the prevailing Party, and if so, to award to that prevailing Party reimbursement for its reasonable attorneys' fees, costs and disbursements. All proceedings and decisions of the arbitrator shall be deemed Confidential Information of each of the Parties, and shall be subject to Article 14. From the date of submission of the dispute to the Executive Officers in Section 16.2, until such time as the dispute has become finally settled, the running of the time periods as to which a Party alleged to have breached the Agreement must cure such breach becomes suspended as to any breach that is the subject matter of the dispute. Judgment on the award so rendered will be final and may be entered in any court having jurisdiction thereof.

16.5 Equitable Relief. Nothing in this Article 16 will preclude either Party from seeking equitable relief or interim or provisional relief from a court of competent jurisdiction, including a temporary restraining order, preliminary injunction or other interim equitable relief, concerning a dispute prior to

any arbitration if necessary to protect the interests of such Party or to preserve the status quo pending the arbitration proceeding.

16.6 Excluded Matters. Notwithstanding Sections 16.2 through 16.4, any dispute, controversy or claim relating to the scope, validity, enforceability or infringement of any Patent shall be submitted to a court of competent jurisdiction.

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ARTICLE 17
MISCELLANEOUS

17.1 Entire Agreement; Amendment. This Agreement, the Vaccine Collaboration Agreement, and the Exhibits and Schedules hereto, sets forth the complete, final and exclusive agreement and all the covenants, promises, agreements, warranties, representations, conditions and understandings between the Parties hereto with respect to the subject matter hereof and supersedes, as of the Effective Date, all prior and contemporaneous agreements and understandings between the Parties with respect to the subject matter hereof, including the Confidentiality Agreement. No subsequent alteration, amendment, change or addition to this Agreement shall be binding upon the Parties unless reduced to writing and signed by an authorized officer of each Party.

17.2 Force Majeure. Both Parties shall be excused from the performance of their obligations under this Agreement to the extent that such performance is prevented by force majeure and the nonperforming Party promptly provides notice of the prevention to the other Party. Such excuse shall be continued so long as the condition constituting force majeure continues and the nonperforming Party takes reasonable efforts to remove the condition. For purposes of this Agreement, force majeure shall include conditions beyond the control of the Parties, including an act of God, war, terrorist act, labor strike or lock-out, epidemic, and fire, earthquake, storm or like catastrophe. If a force majeure persists for more than ninety (90) days, then the Parties will discuss in good faith the modification of the Parties' obligations under this Agreement in order to mitigate the delays caused by such force majeure.

17.3 Notices. Any notice required or permitted to be given under this Agreement shall be in writing, shall specifically refer to this Agreement, and shall be addressed to the appropriate Party at the address specified below or such other address as may be specified by such Party in writing in accordance with this Section 17.3, and shall be deemed to have been given for all purposes (a) when received, if hand-delivered or sent by confirmed facsimile or a reputable courier service, or (b) five (5) Business Days after mailing, if mailed by first class certified or registered airmail, postage prepaid, return receipt requested.

If to Liquidia:

If by courier to:

Liquidia Technologies, Inc.
419 Davis Dr. Suite 100
Morrisville, NC 27560
Attn: Legal
Fax: [***]

If by mail to:

Liquidia Technologies, Inc.
P.O. Box 110085
Research Triangle Park, NC 27709
Attn: Legal
Fax: [***]

With a copy to (which shall not constitute notice):

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Cooley LLP
One Freedom Square
Reston Town Center
11951 Freedom Drive
Reston, VA 20190-5656
Attn: Kenneth J. Krisko
Fax: [***]

If to GSK:

GlaxoSmithKline
709 Swedeland Road
King of Prussia, PA, 19406
Attention: Business Development
Facsimile: [***]

With a copy to (which shall not constitute notice):

GlaxoSmithKline

2301 Renaissance Boulevard
Mailcode RN0220
King of Prussia, PA 19406-2772
Attention: Vice President and Associate General Counsel, Business Development Transactions
Telephone: [***]
Facsimile: [***]

17.4 No Strict Construction; Headings. This Agreement has been prepared jointly by the Parties and shall not be strictly construed against either Party. Ambiguities, if any, in this Agreement shall not be construed against any Party, irrespective of which Party may be deemed to have authored the ambiguous provision. The headings of each Article and Section in this Agreement have been inserted for convenience of reference only and are not intended to limit or expand on the meaning of the language contained in the particular Article or Section.

17.5 Assignment.

(a) Subject to Section 17.5(c) below, neither Party may assign or transfer this Agreement or any rights or obligations hereunder without the prior written consent of the other (not to be unreasonably withheld or delayed), except that a Party may make such an assignment without the other Party's consent to (i) an Affiliate (for so long as such entity remains an Affiliate) or (ii) a Third Party in connection with a Change of Control of such Party (such Third Party, an **"Acquiror"**). Any successor or assignee of rights or obligations permitted hereunder shall, in writing to the other Party, expressly assume performance of such rights or obligations. Any permitted assignment shall be binding on the successors of the assigning Party. Any assignment or attempted assignment by either Party in violation of the terms of this Section 17.5 shall be null, void and of no legal effect.

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(b) In the event that a Party undergoes a Change of Control, all intellectual property rights owned or otherwise controlled by the Acquiror or its Affiliates at any time (excluding the Party hereto that becomes an Affiliate of the Acquiror as a result of such transaction) shall be excluded from the licenses granted under this Agreement (including any such intellectual property owned or otherwise controlled by such Acquiror as of the date of consummation of such transaction but not acquired as a result of the transaction), except for any intellectual property rights generated or owned by the Acquiror or its Affiliates pursuant to the term of this Agreement in performing any activity under this Agreement.

(c) GSK acknowledges that Liquidia may sell, to one or more Third Parties, Liquidia's rights to receive milestone payments and/or royalties under this Agreement to an entity whose principal purpose is to provide financing to Liquidia (the **"Royalty Purchaser"**). Upon the sale to a Royalty Purchaser described in the foregoing sentence, Liquidia shall notify GSK in writing and at Liquidia's direction, GSK shall deliver directly to the Royalty Purchaser instead of to Liquidia those payments contemplated by the Agreement. For clarity, GSK shall continue to deal directly with Liquidia in all other respects concerning such payments, including reporting obligations and audit rights as provided under the Agreement and GSK shall not be required to provide any other information, including its Confidential Information, to such Royalty Purchaser. Payments to a Royalty Purchaser shall constitute a full discharge of GSK's obligations in respect of such payment. For clarity, nothing herein shall obligate GSK to pay more than the amounts that are required under this Agreement absent such sale to a Royalty Purchaser. Liquidia shall indemnify and hold harmless the GSK Indemnitees from and against any and all Claims arising out of any and all claims by a Royalty Purchaser with respect to or resulting from any sale as described under this Section 17.5(c), except where such Claims are due to GSK's failure to perform its obligations under the Agreement.

17.6 Performance by Affiliates. Each Party may discharge any obligations and exercise any right hereunder through any of its Affiliates. Each Party hereby guarantees the performance by its Affiliates of such Party's obligations under this Agreement, and shall cause its Affiliates to comply with the provisions of this Agreement in connection with such performance. Any breach by a Party's Affiliate of any of such Party's obligations under this Agreement shall be deemed a breach by such Party, and the other Party may proceed directly against such Party without any obligation to first proceed against such Party's Affiliate.

17.7 Further Actions. Each Party agrees to execute, acknowledge and deliver such further instruments, and to do all such other acts, as may be necessary or appropriate in order to carry out the purposes and intent of this Agreement.

17.8 Severability. If any one or more of the provisions of this Agreement is held to be invalid or unenforceable by any court of competent jurisdiction from which no appeal can be or is taken, the provision shall be considered severed from this Agreement and shall not serve to invalidate any remaining provisions hereof. The Parties shall make a good faith effort to replace any invalid or unenforceable provision with a valid and enforceable one such that the objectives contemplated by the Parties when entering this Agreement may be realized.

17.9 No Waiver. Any delay in enforcing a Party's rights under this Agreement or any waiver as to a particular default or other matter shall not constitute a waiver of such Party's

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rights to the future enforcement of its rights under this Agreement, except with respect to an express written and signed waiver relating to a particular matter for a particular period of time.

17.10 Independent Contractors. Each Party shall act solely as an independent contractor, and nothing in this Agreement shall be construed to give either Party the power or authority to act for, bind, or commit the other Party in any way. Nothing herein shall be construed to create the relationship of partners, principal and agent, or joint-venture partners between the Parties.

17.11 English Language; Governing Law. This Agreement was prepared in the English language, which language shall govern the interpretation of, and any dispute regarding, the terms of this Agreement. This Agreement and all disputes arising out of or related to this Agreement or any breach hereof shall be governed by and construed under the laws of the State of Delaware, without giving effect to any choice of law principles that would require the application of the laws of a different state.

17.12 Counterparts. This Agreement may be executed in one (1) or more counterparts, by original, facsimile or PDF signature, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

{Signature page follows}

Confidential treatment has been requested with respect to portions of this agreement as indicated by "[***]" and such confidential portions have been deleted and filed separately with the Securities and Exchange Commission pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

IN WITNESS WHEREOF, the Parties have executed this Agreement by their duly authorized officers as of the Effective Date.

GLAXO GROUP LIMITED		**LIQUIDIA TECHNOLOGIES, INC.**	
By:	/s/ Vaughn Walton	By:	/s/ Neal F. Fowler
Name:	Vaughn Walton	Name:	Neal F. Fowler
Title:	Authorised Signatory	Title:	CEO

Confidential treatment has been requested with respect to portions of this agreement as indicated by "[***]" and such confidential portions have been deleted and filed separately with the Securities and Exchange Commission pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

LIST OF EXHIBITS:

Confidential treatment has been requested with respect to portions of this agreement as indicated by "[***]" and such confidential portions have been deleted and filed separately with the Securities and Exchange Commission pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

EXHIBIT A
LIQUIDIA PATENTS

Application No.	Patent No.	A&B Ref. No.	UNC ROIs	LT Ref. No.	Country	Status	Date Issued	Date Filed	Title
2004276302	2004276302	035052/ 338794	04-0013	5001	Australia	Issued	5/19/2011	9/23/2004	Photocurable Perfluoropolyethers for Use as Novel Materials in Microfluidic Devices
08100301.6	1106262	035052/ 339054	04-0013	5001	Hong Kong	Issued	12/30/2011	9/23/2004	Photocurable Perfluoropolyethers for Use as Novel Materials In Microfluidic Devices
200601857-6	120640	035052/ 338805	04-0013	5001	Singapore	Issued	10/31/2008	9/23/2004	Photocurable Perfluoropolyethers for Use as Novel Materials in Microfluidic Devices
2,540,035		035052/ 338795	04-0013	5001	Canada	Pending		9/23/2004	Photocurable Perfluoropolyethers for Use as Novel Materials in Microfluidic Devices
2006-527164	4586021	035052/ 338801	04-0013	5001	Japan	Issued	9/10/2010	3/20/2006	Photocurable Perfluoropolyethers for Use as Novel Materials in Microfluidic Devices
PA/a/2006/003201		035052/ 338803	04-0013	5001	Mexico	Pending		3/22/2006	Perfluoropolyethers for Use as Novel Materials in Microfluidic Devices
04784924.5	1694731	035052/ 338798	04-0013	5001	Europe	Issued	3/28/2012	4/21/2006	Photocurable Perfluoropolyethers for Use as Novel Materials in Microfluidic Devices
2212/DELNP/2006		035052/ 338800	04-0013	5001	India	Pending		4/24/2006	Photocurable Perfluoropolyethers for Use as Novel Materials in Microfluidic Devices
200480034620.1	ZL 200480034620.1	035052/ 338796	04-0013	5001	China	Issued	7/20/2011	5/23/2006	Photocurable Perfluoropolyethers for Use as Novel Materials in Microfluidic Devices
10/572,764		035052/ 338792	04-0013	5001	United States	Notice of Allow		5/16/2007	Photocurable Perfluoropolyethers for Use as Novel Materials in Microfluidic Devices
11/825,482		035052/ 338793	04-0013	5001/01	United States	Pending		7/6/2007	Photocurable Perfluoropolyethers for

									Use as Novel Materials in Microfluidic Devices
T emp04-0013USCON		035052/ 410601	04-0013	5001/02	United States	New App			Photocurable Perfluoropolyethers for Use as Novel Materials in Microfluidic Devices
12/063,284	8,158,728	035052/ 339941	04-0067	5003/01	United States	Issued	4/17/2012	5/29/2009	Methods and Materials for Fabricating Microfluidic Devices
13/438,431		035052/ 417580	04-0067	5003/02	United States	Pending		4/3/2012	Methods and Materials for Fabricating Microfluidic Devices
06801056.0		035052/ 339740	04-0067	5003/01	Europe	Pending			Methods and Materials for Fabricating Microfluidic Devices
200603890.5	123152	035052/ 338898	04-0104	5002	Singapore	Issued		6/7/2006	Methods for Fabricating Isolated Micro-and Nano- Structures Using Soft or Imprint Lithography
176,254		035052/ 338892	04-0104	5002	Israel	Pending		6/12/2006	Methods for Fabricating Isolated Micro-and Nano- Structures Using Soft or Imprint Lithography
2006/04885		035052/ 338900	04-0104	5002	South Africa	Pending		6/13/2006	Methods for Fabricating Isolated Micro-and Nano- Structures Using Soft or Imprint

Application No.	Patent No.	A&B Ref. No.	UNC ROIs	LT Ref. No.	Country	Status	Date Issued	Date Filed	Title
									Lithography
2004318602	2004318602	035052/ 338850	04-0104	5002	Australia	Issued	3/25/2010	6/14/2006	Methods for Fabricating Isolated Micro-and Nano- Structures Using Soft or Imprint Lithography
PA/a/2006/006738	266246	035052/ 338896	04-0104	5002	Mexico	Issued	4/23/2009	6/14/2006	Methods for Fabricating Isolated Micro- and Nano- Structures Using Soft or Imprint Lithography
2,549,341		035052/ 338852	04-0104	5002	Canada	Pending		6/14/2006	Methods for Fabricating Isolated Micro- and Nano- Structures Using Soft or Imprint Lithography
2006-545541		035052/ 338895	04-0104	5002	Japan	Pending		6/16/2006	Methods for Fabricating Isolated Micro- and Nano- Structures Using Soft or Imprint Lithography
2006282042		035052/ 339168	04-0104	5002	Australia	Pending		6/19/2006	Nanoparticle Fabrication Methods, Systems, and Materials
417848-3		035052/ 338851	04-0104	5002	Brazil	Pending		6/19/2006	Methods for Fabricating Isolated Micro- and Nano- Structures Using Soft or Imprint Lithography
10-2006-7012179		035052/ 338894	04-0104	5002	Korea, Republic of	Pending		6/19/2006	Methods for Fabricating Isolated Micro-and-Nano- Structures Using Soft or Imprint Lithography
04821787.1		035052/ 338889	04-0104	5002	Europe	Pending		7/5/2006	Methods for Fabricating Isolated Micro- and Nano- Structures Using Soft or Imprint Lithography
3991/DELNP/2006		035052/ 338893	04-0104	5002	India	Pending		7/11/2006	Methods for Fabricating Isolated Micro- and Nano- Structures Using Soft or Imprint Lithography
200480041942.9	ZL 200480041942.9	035052/ 338853	04-0104	5002	China	Issued	7/22/2009	8/21/2006	Methods for Fabricating Isolated Micro-and Nano- Structures Using Soft or Imprint Lithography
11/594,023		035052/ 339497	04-0104	5022	United States	Pending		11/7/2006	Isolated and Fixed Micro and Nano Structures and Methods Thereof
10/583,570		035052/ 338899	04-0104	5002	United States	Pending		3/5/2007	Methods for Fabricating Isolated Micro- And Nano- Structures Using Soft or Imprint Lithography
07103263.7		035052/ 338890	04-0104	5002	Hong Kong	Pending		3/27/2007	Methods for Fabricating Isolated Micro-and Nano- Structures Using Soft or Imprint Lithography
11/825,469		035052/ 339501	04-0104	5002/01	United States	Pending		7/6/2007	Methods for Fabricating Isolated Micro- and Nano- Structures Using Soft or Imprint Lithography
9431/DELNP/2007		035052/ 339173	04-0104	5020	India	Pending		12/6/2007	Nanoparticle Fabrication Methods, Systems, and Materials
2,611,985		035052/	04-0104	5020	Canada	Pending		12/12/2007	Nanoparticle Fabrication Methods, Systems, and

Application No.	Patent No.	A&B Ref. No.	UNC ROIs	LT Ref. No.	Country	Status	Date Issued	Date Filed	Title
		339170							Materials
0611827-5	PI0611827.5	035052/ 339169	04-0104	5020	Brazil	Issued		12/17/2007	Nanoparticle Fabrication Methods, Systems, and Materials
06824764.2		035052/ 339172	04-0104	5020	Europe	Pending		1/17/2008	Nanoparticle Fabrication Methods, Systems, and Materials
200680029884.7		035052/ 339171	04-0104	5020	China	Pending		2/15/2008	Nanoparticle Fabrication Methods, Systems, and Materials
2008-517202		035052/ 339175	04-0104	5020	Japan	Pending		2/15/2008	Nanoparticle Fabrication Methods, Systems, and Materials
06849872.4		035052/ 343596	04-0104	5022	Europe	Pending		6/3/2008	Isolated and Fixed Micro and Nano Structures and Methods Thereof
12/374,182		035052/ 367428	04-0104	5033	United States	Pending		10/15/2009	Nanoparticle Fabrication Methods, Systems, and Materials for Fabricating Artificial Red Blood Cells
11/921,614		035052/ 339178	04-0104	5020	United States	Pending		7/28/2010	Nanoparticle Fabrication Methods, Systems, and Materials
2011-104856		035052/ 405505	04-0104	5002	Japan	Pending		5/10/2011	Methods for Fabricating Isolated Micro- and Nano- Structures Using Soft or Imprint Lithography
10-2011-7020441		035052/ 408972	04-0104	5002	Korea, Republic of	Pending		9/1/2011	Methods for Fabricating Isolated Micro- and Nano- Structures Using Soft or Imprint Lithography
MX/a/2007/016039	295862	035052/ 339176	04-0104	5020	Mexico	Issued	3/9/2012		Nanoparticle Fabrication Methods, Systems, and Materials
Temp04-G104KRCONT			04-0104		Korea, Republic of	New App			
11/879,746	US 2008-0181958		04-0104	5030	United States	Pending		6/17/2006	Nanoparticle Fabrication Methods, Systems, and Materials
12/444,662		035052/ 370388	07-0028	5010	United States	Pending		3/11/2010	Nanoparticle Compositions for Controlled Delivery of Nucleic Acids
US 11/633,763	US 8,128,393	n/a	n/a	5013	US	Issued	March 6, 2012	Dec. 4, 2006	Methods And Materials For Fabricating Laminate Nanomolds And Nanoparticles Therefrom
07874162.6	2117725	n/a	n/a	5013	EP	Pending		Dec. 4, 2006	Methods And Materials For Fabricating Laminate Nanomolds And Nanoparticles Therefrom
200780050904.3	101668594	n/a	n/a	5013	CN	Pending		Dec. 4, 2006	Methods And Materials For Fabricating Laminate Nanomolds And Nanoparticles Therefrom
2009-540277	2010-511544	n/a	n/a	5013	JP	Pending		Dec. 4, 2006	Methods And Materials For Fabricating Laminate Nanomolds And Nanoparticles Therefrom
10-2009-7013846	2009-0096493	n/a	n/a	5013	KR	Pending		Dec. 4, 2006	Methods And Materials For Fabricating Laminate Nanomolds And Nanoparticles

Application No.	Patent No.	A&B Ref. No.	UNC ROIs	LT Ref. No.	Country	Status	Date Issued	Date Filed	Title
									Therefrom
US 13/354,046 (DivOl off 5013US)		n/a	n/a	5013/01	US	Pending		Dec. 4, 2006	Methods And Materials For Fabricating Laminate Nanomolds And Nanoparticles Therefrom
US 12/087,374	US 2009-0250588	n/a	n/a	5015	US	Pending		Jan. 4, 2006	Nanostructured Surfaces For Biomedical/Biomaterial Applications And Processes Thereof
US 12/439,281	US 2010-0055459	n/a	n/a	5035	US	Pending		Aug 30, 2006	Nanoparticles Having Functional Additives For Self And Directed Assembly And Methods Of Fabricating Same
US 12/250,461	US 7,976,759	n/a	n/a	5037	US	Issued	July 12, 2011	Oct 12, 2007	System And Method For Producing Particles And Patterned Films
08838460.7	2207670	n/a	n/a	5037	EP	Pending		Oct 12,2007	System And Method For Producing Particles And Patterned Films
200880120295.9	101896337	n/a	n/a	5037	CN	Pending		Oct 12, 2007	System And Method For Producing Particles And Patterned Films
2648/CHENP/2010	2648/CHENP/2 010 A	n/a	n/a	5037	IN	Pending		Oct 12, 2007	System And Method For Producing Particles And Patterned Films
2010-529144	2011-501703	n/a	n/a	5037	JP	Pending		Oct 12, 2007	System And Method For Producing Particles And Patterned Films
11100331.5									
US 13/156,147									
US 12/630,569									
PI0923282-6									
200980156363.1									
09831124.4									
4696/CHENP/2011									
10-2011-7015316									
MX/a/2011/005900									
12/514,484									
12/528,571		035052/ 377412	07-0074	5028	United States	Pending		8/25/2009	Discrete Size and Shape Specific Pharmaceutical Organic Nanoparticles
13/000,244		035052/ 398597	08-0042	5043	United States	Pending		6/24/2008	High Fidelity Through Hole Film, and Associated Method
12/989,315		035052/ 396046	08-0090	5042	United States	Pending		4/25/2008	Degradable Compounds and Methods of Use Thereof, Particularly with Particle Replication in Non-Wetting Templates
13/383,518		035052/ 414403	10-0005	5047	United States	Pending		1/11/2012	Engineered Aerosol Particles, and Associated Methods
Templ0-0005JP		035052/ 414381	10-0005	5047	Japan	New App			Engineered Aerosol Particles, and Associated Methods
10742329.5		035052/ 414380	10-0005	5047	Europe	Pending			Engineered Aerosol Particles, and Associated Methods

Application No.	Patent No.	A&B Ref. No.	UNC ROIs	LT Ref. No.	Country	Status	Date Issued	Date Filed	Title
PCT/US2011/051775		035052/ 410148	11-0035	5055	International	Pending		9/15/2011	Asymmetric Bifunctional Silyl Monomers and Particles Thereof as Prodrugs and Delivery Vehicles for Pharmaceutical, Chemical and Biological Agents
PCT/US2012/025260		035052/ 415802	11-0053	6001	International	Pending		2/15/2011	Nanoparticles with Reversible Disulfide Linkages
61/564,626		035052/ 412946	12-0023	6002	United States	Pending		11/29/2011	Geometrically Engineered Particles and Methods for Modulating Macrophage or Immune Responses

Confidential treatment has been requested with respect to portions of this agreement as indicated by "[***]" and such confidential portions have been deleted and filed separately with the Securities and Exchange Commission pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

EXHIBIT B

Schedule of Third Party Agreements

Bill & Melinda Gates Global Access Rights Letter Agreement, February 18, 2011, as amended.

PATH Vaccine Solutions, Research Collaboration Agreement, November 1, 2011.

Program for Appropriate Technology in Health (PATH)/(MVI), Research Collaboration Agreement, November 22, 2010.

University of North Carolina, Chapel Hill:

Amended and Restated License Agreement, December 15, 2008, as amended;

Material Transfer Agreement, August 16, 2007, as amended;

Supported Research Agreement, September 1, 2005, as amended.

Confidential treatment has been requested with respect to portions of this agreement as indicated by "[***]" and such confidential portions have been deleted and filed separately with the Securities and Exchange Commission pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

EXHIBIT C

Inhaled Plan and Budget

[***]

[Eleven pages omitted in their entirety]

Confidential treatment has been requested with respect to portions of this agreement as indicated by "[***]" and such confidential portions have been deleted and filed separately with the Securities and Exchange Commission pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

EXHIBIT D

STOCK PURCHASE AGREEMENT

LIQUIDIA TECHNOLOGIES, INC.
FIRST AMENDMENT AND JOINDER TO
SERIES C-1 PREFERRED STOCK PURCHASE AGREEMENT

This FIRST AMENDMENT AND JOINDER TO SERIES C-1 PREFERRED STOCK PURCHASE AGREEMENT (the "**Amendment**") is made as of this day of June, 2012, by and among Liquidia Technologies, Inc., a Delaware corporation (the "**Company**"), and each of the persons and entities listed on Schedule A hereto (each of which is herein referred to as an "**Investor**").

WHEREAS, the Company and Bill & Melinda Gates Foundation are parties to that certain Series C-1 Preferred Stock Purchase Agreement dated as of February 18, 2011 (as executed, the "**Original Agreement**" and as amended hereby, the "**Agreement**");

WHEREAS, the Original Agreement provided for the sale by the Company of up to 6,270,064 shares of the Company's Series C-1 Preferred Stock (the "**Shares**") in one or more Subsequent Closings (as defined therein) to occur on or prior to June 18, 2011; and

WHEREAS, the Company and the other parties hereto desire to amend the Original Agreement in order to provide for the purchase by Glaxo Group Limited (which is hereby designated a "**New Investor**" pursuant to the Agreement) of Shares in a Subsequent Closing effective on the date of this Amendment.

NOW, THEREFORE, the parties hereto, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, hereby agree as follows:

1. Defined Terms. Terms that are used herein with initial capital letters and that are not otherwise defined shall have the meanings given to them in the Original Agreement.

2. Subsequent Closing. Section 1.3 of the Original Agreement is hereby amended to read as follows:

1.3 Subsequent Closing. The subsequent closing of the purchase and sale of 4,765,248 Shares shall take place at the offices of HLG at 10:00 a.m. on or before June , 2012 (which time, date and place are referred to in this Agreement as the "Subsequent Closing" and, together with the Initial Closing, each, a "Closing"). At the Subsequent Closing, the Company shall deliver to the New Investor a certificate representing the Shares that such New Investor is purchasing against payment of the aggregate Series C-1 Purchase Price therefor by check or wire transfer. The New Investor shall become a party to, and become bound by, this Agreement, the Investors' Rights Agreement, the

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Voting Agreement and the First Refusal and Co-Sale Agreement as an "Investor" thereunder without, except as otherwise agreed with the Company, the need for an amendment to this Agreement, the Investors' Rights Agreement, the Voting Agreement and the First Refusal and Co-Sale Agreement except to add such New Investor as a signatory thereto and to add such New Investor's name to the appropriate schedule to such agreement (including supplementing Schedule A with the name and address of each New Investor, the number of Shares to be purchased by such New Investor at the Subsequent Closing and the total Series C-1 Purchase Price payable by such New Investor at the Subsequent Closing) and each New Investor shall have the rights and obligations hereunder and thereunder as an "Investor", in each case as of the date of the Subsequent Closing.

3. Section 2.2(a)(i) is hereby amended to read as follows:

(i) Preferred Stock. 43,088,173 shares of preferred stock, par value $0.001 per share (the "**Preferred Stock**"), 1,974,430 shares of which have been designated Series A Preferred Stock (the "**Series A Preferred Stock**"), all of which are issued and outstanding, 1,834,862 shares of which have been designated Series A-1 Preferred Stock (the "**Series A-1 Preferred Stock**"), all of which are issued and outstanding, 4,620,123 shares of which have been designated Series B Preferred Stock (the "**Series B Preferred Stock**"), of which

4,496,908 shares are issued and outstanding, 24,199 of which have been reserved for issuance upon exercise of that certain Warrant to Purchase Stock issued to Silicon Valley Bank (the "**SVB Warrant**") and 99,016 of which have been reserved for issuance upon exercise of that certain Wan-ant to Purchase Stock issued to Velocity Financial Group, Inc. (and together with the SVB Warrant, the "**Series B Warrants**"), 17,102,578 shares of which have been designated Series C Preferred Stock (the "**Series C Preferred Stock**"), all of which have been issued and are outstanding and 17,556,180 shares of which have been designated Series C-1 Preferred Stock (the "**Series C-1 Preferred Stock**"), all of which are reserved for issuance pursuant to this Agreement. The rights, privileges and preferences of the Series A Preferred Stock, the Series A-1 Preferred Stock, the Series B Preferred Stock, the Series C Preferred Stock and the Series C-1 Preferred Stock are as stated in the Restated Certificate and all such rights, privileges and preferences are valid, binding and enforceable in accordance with the State of Delaware General Corporation Law. Each share of Series A Preferred Stock is convertible into 1.3539 shares of Class A Common Stock, each share of Series A-1 Preferred Stock is

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convertible into 1.9512 shares of Class A Common Stock, each share of Series B Preferred Stock is convertible into 2.0026 shares of Class A Common Stock, each share of Series C Preferred Stock is convertible into 1.8331 shares of Class A Common Stock, and each share of Series C-1 Preferred Stock is convertible into 1.0000 shares of Class A Common Stock.

4. Section 3.7 is hereby amended to read as follows:

3.7 Further Limitations on Disposition. Without in any way limiting the representations set forth above, such Investor further agrees not to make any disposition of all or any portion of the Securities (other than to an affiliate) unless and until:

(a) There is then in effect a registration statement under the Act covering such proposed disposition and such disposition is made in accordance with such registration statement; or

(b) (i) Such Investor shall have notified the Company of the proposed disposition and shall have furnished the Company with a detailed statement of the circumstances surrounding the proposed disposition, and (ii) if reasonably requested by the Company, such Investor shall have furnished the Company with an opinion of counsel reasonably satisfactory to the Company that such disposition will not require registration of such shares under the Act. It is agreed that the Company will not require opinions of counsel for transactions made pursuant to Rule 144.

Notwithstanding the provisions of subsections (a) and (b) above, no such registration statement or opinion of counsel shall be necessary for a transfer by an Investor that is (x) a partnership to a partner of such partnership or a retired partner of such partnership who retires after the date hereof, or to the estate of any such partner or retired partner or the transfer by gift, will or intestate succession of any partner to his or her spouse or to the siblings, lineal descendants or ancestors of such partner or his or her spouse or (y) a limited liability company to a member of such limited liability company or a retired member of such limited liability company who retires after the date hereof, or to the estate of any such member ore retired member or the transfer by gift, will or intestate succession of any member to his or her spouse or to the siblings, lineal descendants or ancestors of such member or his or her spouse, if the prospective transferee agrees in all such instances

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in writing to be subject to the terms hereof to the same extent as if her or she were an original Investor hereunder.

5. Condition to Subsequent Closing. Article 6 of the Original Agreement is hereby amended to add the following Section 6.8:

6.8 Collaboration Agreements. The Company and GSK shall have entered into each of the Inhaled Collaboration and Option Agreement, in the form attached hereto as Exhibit F-1.

6. Schedule A. Schedule A to the Original Agreement is hereby replaced with Schedule A attached to this Amendment.

7. No Other Amendment. Except as expressly provided for herein, the Original Agreement shall remain in full force and effect.

[The remainder of this page is intentionally left blank]

Confidential treatment has been requested with respect to portions of this agreement as indicated by "[***]" and such confidential portions have been deleted and filed separately with the Securities and Exchange Commission pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

IN WITNESS WHEREOF, the parties have executed this FIRST AMENDMENT AND JOINDER TO SERIES C-1 PREFERRED STOCK PURCHASE AGREEMENT as of the date first above written.

COMPANY:

Liquidia Technologies, Inc.

By: _____

Name: Neal Fowler

Title: Chief Executive Officer

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IN WITNESS WHEREOF, the parties have executed this FIRST AMENDMENT AND JOINDER TO SERIES C-1 PREFERRED STOCK PURCHASE AGREEMENT as of the date first above written.

INVESTOR:

BILL & MELINDA GATES FOUNDATION

By: _____

Name:
Title:

Confidential treatment has been requested with respect to portions of this agreement as indicated by "[***]" and such confidential portions have been deleted and filed separately with the Securities and Exchange Commission pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

IN WITNESS WHEREOF, the parties have executed this FIRST AMENDMENT AND JOINDER TO SERIES C-1 PREFERRED STOCK PURCHASE AGREEMENT as of the date first above written.

INVESTOR:

GLAXO GROUP LIMITED

By: _____

Name:
Title:

Confidential treatment has been requested with respect to portions of this agreement as indicated by "[***]" and such confidential portions have been deleted and filed separately with the Securities and Exchange Commission pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

Schedule A

Schedule of Investors

Closing Date: **February 18, 2011**
Price Per Share: **$0.886044 for the Bill & Melinda Gates Foundation**

Name and Address	Number of Shares Purchased	Total Purchase Price of Shares
Bill & Melinda Gates Foundation	11,286,115	$ 9,999,994.48
TOTAL	**11,286,115**	**$ 9,999,994.48**

Closing Date: **June ,2012**
Price Per Share: **$0.797440**

Name and Address	Number of Shares Purchased	Total Purchase Price of Shares
Glaxo Group Limited	4,765,248	$ 3,799,999.37
TOTAL	**4,765,248**	**$ 3,799,999.37**

Confidential treatment has been requested with respect to portions of this agreement as indicated by "[***]" and such confidential portions have been deleted and filed separately with the Securities and Exchange Commission pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

EXHIBIT E

PREVENTION OF CORRUPTION — THIRD PARTY GUIDELINES

The GSK Anti-Bribery and Corruption Policy (POL-GSK-007) requires compliance with the highest ethical standards and all anti-corruption laws applicable in the countries in which GSK (whether through a third party or otherwise) conducts business. POL-GSK-007 requires all GSK employees and any third party acting for or on behalf of GSK to ensure that all dealings with third parties, both in the private and government sectors, are carried out in compliance with all relevant laws and regulations and with the standards of integrity required for all GSK business. GSK values integrity and transparency and has zero tolerance for corrupt activities of any kind, whether committed by GSK employees, officers, or third-parties acting for or on behalf of the GSK.

Corrupt Payments — GSK employees and any third party acting for or on behalf of GSK, shall not, directly or indirectly, promise, authorise, ratify or offer to make or make any "payments" of "anything of value" (as defined in the glossary section) to any individual (or at the request of any individual) including a "government official" (as defined in the glossary section) for the improper purpose of influencing or inducing or as a reward for any act, omission or decision to secure an improper advantage or to improperly assist the company in obtaining or retaining business.

Government Officials — Although GSK's policy prohibits payments by GSK or third parties acting for or on its behalf to any individual, private or public, as a "quid pro quo" for business, due to the existence of specific anticorruption laws in the countries where we operate, this policy is particularly applicable to "payments" of "anything of value" (as defined in the glossary section), or at the request of, "government officials" (as defined in the glossary section).

Facilitating Payments — For the avoidance of doubt, facilitating payments (otherwise known as "greasing payments" and defined as payments to an individual to secure or expedite the performance of a routine government action by government officials) are no exception to the general rule and therefore prohibited.

GLOSSARY

The terms defined herein should be construed broadly to give effect to the letter and spirit of the ABAC Policy. GSK is committed to the highest ethical standards of business dealings and any acts that create the appearance of promising, offering, giving or authorizing payments prohibited by this policy will not be tolerated.

Anything of Value: this term includes cash or cash equivalents, gifts, services, employment offers, loans, travel expenses, entertainment, political contributions, charitable donations, subsidies, per diem payments, sponsorships, honoraria or provision of any other asset, even if nominal in value.

Payments: this term refers to and includes any direct or indirect offers to pay, promises to pay, authorizations of or payments of anything of value.

Government Official shall mean:

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- Any officer or employee of a government or any department, agency or instrument of a government;
- Any person acting in an official capacity for or on behalf of a government or any department, agency, or instrument of a government;
- Any officer or employee of a company or business owned in whole or part by a government;
- Any officer or employee of a public international organization such as the World Bank or United Nations;
- Any officer or employee of a political party or any person acting in an official capacity on behalf of a political party; and/or
- Any candidate for political office.

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Schedule 1.109

NET SALES

"Net Sales" means gross invoiced sales of Product to Third Parties by GSK or its Affiliates or sublicensees in a particular period, less the following deductions from such gross amounts which are actually incurred, allowed, paid, accrued or specifically allocated:

(a) credits or allowances actually granted for damaged Product, returns or rejections of Product, price adjustments, and billing errors;

(b) governmental and other rebates (or equivalents thereof) granted to managed health care organizations, pharmacy benefit managers (or equivalents thereof), national, state/provincial, local, and other governments, their agencies and purchasers, and reimbursers, or to trade customers;

(c) such Party's normal and customary trade, cash and quantity discounts, allowances, and credits actually allowed or paid;

(d) commissions allowed or paid to Third Party distributors, brokers, or agents other than sales personnel, sales representatives, and sales agents employed by such Party;

(e) transportation costs, including insurance, for outbound freight related to delivery of Product to the extent included in the gross amount invoiced;

(f) sales taxes, value added taxes (VAT), and other taxes directly linked to the sales of Product to the extent included in the gross amount invoiced;

(g) the actual amount of any write offs for bad debt directly relating to sales of Product in the period; and

(h) any other items actually deducted from gross invoiced sales amounts as reported by GSK in its financial statements in accordance with the International Financial Reporting Standards, applied on a consistent basis.

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SCHEDULE 3.5

R&D POLICY PRINCIPLES

A. Ethical Conduct Requirements

Ethical Conduct

The Parties are committed to the highest standards of conduct in all aspects of their respective businesses and to conduct their business with honesty and integrity, and in compliance with all applicable legal and regulatory requirements.

- Always act with integrity and honesty and protect the Parties' public image and reputation in relationships with customers, competitors, suppliers, business partners and staff
- Promptly raise any concerns about possible unethical or illegal conduct
- Be free from actual or potential conflicts of interest that might influence, or appear to influence their judgment or actions when performing duties on behalf of the Parties
- The Parties' reputation and the respect of those who deal with the Parties must not be put at risk by acceptance of any entertainment, gifts or favors intended or perceived by others to influence their business judgment
- Communications with external audiences, i.e., Investors and the Media, should be managed through appointed company spokespersons to minimize risk to the Parties' reputation
- Provide accurate and reliable information in records submitted, safeguard the Company's confidential information, and respect the confidential information of other parties with whom the Company does business or competes

Management of Human Safety Information

The safeguarding of human subjects participating in clinical trials and patients who use devices or take investigational or licensed medicinal products, certain consumer healthcare products, vaccines, or biological products (the foregoing collectively referred to as the "Products") is of paramount importance. Products would also include blinded, placebo, or control agents used in clinical studies. Therefore, the Parties require a framework for management of Human Safety Information. The framework includes, but is not limited to:

- Safety reviews of Products to evaluate emergent safety data
- Creation of appropriate committees and safety departments to proactively address human safety throughout Product development
- Reporting of Human Safety Information to safety departments in a timely fashion. This includes any information relating to human health and/or wellbeing arising following exposure of humans to products including reports of drug abuse or overdose, reports of drug interaction, or information received as part of product complaints

Care and Ethical Treatment of Animals in Research

- Animals should be used in research only when required by regulatory authorities or where there are no alternatives through adherence to the "3R" Principles—reducing the

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number of animals used, replacing animals with non-animal methods whenever possible and refining the research techniques used. In addition, the Parties include two more R's: Responsibility and Respect for animals involved in animal research.

- The Parties believe in using the highest standards for the humane care and treatment of all animals used in research, development and testing, including adherence to the principles (listed below), and all applicable legal and regulatory requirements, with a default to which ever is more stringent.

  - Access to species appropriate food and water

- Access to species specific housing, including species appropriate temperature and humidity levels
- Access to humane care and a program of veterinary care
- Animal housing that minimizes the development of abnormal behaviors and allows for normal species specific behavior,
- Adherence to principles of replacement, reduction and refinement in the design of in vivo studies
- Study design reviewed by institutional ethical review panel Commitment to minimizing pain and distress during in vivo studies
- Work performed by appropriately trained staff
- No Great Apes should be used for research

B. Requirements for Engaging External Experts and Healthcare Professionals

Use of External Experts within R&D

The Parties believe that the engagement of external experts in R&D should be done in accordance with the following principles:

- There must be a legitimate need for the services of the expert that cannot be fulfilled in-house, and the minimum number of experts needed should be used
- Selection of experts should be based solely on the expert's qualifications and expertise in the subject matter for which such expert is retained
- The expert's services must be documented in a written signed agreement
- Compensation must be based on fair market value for the services provided
- Reimbursement or pre-payment for costs associated with travel, lodging, meals and hospitality (i.e. refreshments, background music at meetings) for an expert are acceptable if permitted by all law for the location in which the services are rendered and are modest in value

- Experts shall not receive any gifts of any value, especially where the expert is also a healthcare professional
  - Gift includes anything of value, regardless of amount, given to show friendship, appreciation, or support, including meals, entertainment or recreational activities (excludes fair market value for services rendered).

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- Healthcare Professionals includes, but is not limited to, physicians, their allied health professionals, and medical office staff. This term also applies to pharmacists and employees of pharmacy benefit managers.

C. Requirements for Funding for Charitable Donations and External Science/Medical Programs

Charitable Donations

Charitable donations to an eligible Health-Related Organization are allowed. Charitable donations of either funds or in-kind support are permitted if they are for the purpose of advancing the general mission of an eligible, health-related recipient organization and if they are not tied or directed to a specific event or program.

To be considered eligible for a donation, the health-related organization must meet all of the following:

- Non-profit organization
- The organization's principle mission involves advancing science, medicine, or public health (collectively, a "health-related" mission)
- The organization does not prescribe, purchase or recommend the Parties products, unless the request for a charitable donation for such an organization is for a widely publicized fund-raising event or campaign in support of the health-related mission of the organization
- The organization, as well as its management and leadership, are independent of the control of the Parties or undue influence of any of the Parties' employees or agents

Even if the health-related organization is eligible to receive a charitable donation, the donation may not be provided if a donation is intended:

- As a means of rewarding the prescribing, recommending, or use of the Parties products or services, including the influencing of formulary inclusion or placement
- As a means of promoting the use of the Parties products or services. Return on investment (ROI) analyses are not permitted
- As a means of supporting political causes or candidates
- As a means of supporting any organization or activity without a direct and bona fide scientific, medical, or public health purpose

General Requirements for US Independent Medical Education

Funding for External Science/Medical Programs (FESMP) means financial support of specific activities intended to further the progress of science, scientific/medical education, and the public health, for which the Parties will not take any intellectual property or other proprietary interest.

- A recipient of FESMP must be reasonably qualified to conduct high quality educational programs, research, or other activity being funded
- FESMP is not permitted if used as a means of rewarding the prescribing, recommending, or use of the Parties products or services, including the influencing of formulary inclusion/placement

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- A recipient of FESMP must agree to make meaningful disclosure of any financial sponsorship from the partner
- FESMP may not be "expensed" or paid with the personal funds of an employee or contractor, and then reimbursed
- FESMP is not permitted as a means of supporting political causes or candidates
- FESMP is not permitted if used as a means of supporting any organization or activity without a direct and bona fide scientific, medical, or public health purpose
- FESMP must comply with all substantive and procedural requirements established by the law where the program or activity potentially being funded will take place

D. Clinical Research Requirements

Maintaining the Confidentiality of Protected Medical Information

The Parties respect the confidential nature of protected medical information (PMI) originating from both healthy and patient volunteers involved in clinical, genetic, and other research work or from staff employed by the Parties. Therefore, a framework should be in place to safeguard PMI against inappropriate collection, retention, use and disclosure (in addition to compliance with law and regulations).

Safeguards include, but are not limited to:

- Collecting PMI only for specific and lawful purposes
- Collecting, retaining, using, reusing, and disclosing PMI only with valid consent or as otherwise permitted by law or regulation
- PMI obtained from external sources is treated as a re-use and all reuse must be consistent with the original informed consent
- Retention of PMI only for as long as business activities or scientific research requires and retention of only the minimum amount of identifying information necessary
- Ensuring the physical and technological security of PMI
- Not using PMI in external publications
- Never transferring PMI from the pharmaceutical R&D division to the marketing function unless permission is obtained from the individual

If PMI is collected that indicates the need for immediate clinical intervention, that information will be communicated to the study investigator or physician of record.

Personally Identifiable Information (PII) means information which identifies a specific individual including but not limited to, name, address, and national identification numbers (e.g. Social Security Number)

Protected Medical Information (PMI) is PII that describes clinical and medical conditions, genetic status, treatment of conditions, health status, sexual orientation, ethnic origin, etc and includes both encoded clinical trial data and overtly identifiable data.

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Standards for Collecting, Obtaining and Using Human Biological Samples in Research

The Parties respect the interest of donors of human biological samples used in research and require that certain standards should apply to the collection, obtaining and use of such human biological samples, as set forth below.

- Ensure that samples are collected with informed consent and ethics committee/ Institutional Review Board (IRB) approval in accordance with the applicable research requirements of Good Clinical Practice (International Conference on Harmonization). Additionally, through informed consent, donors must be made aware that the research is being undertaken by a commercial entity and that, where applicable, the research involves the analysis of DNA and /or medical information.
- When obtaining samples from another entity that collected the samples for reasons unrelated to the Parties, confirmation that the entity complied with relevant requirements for informed consent, ethics committee/IRB approval and data privacy is required
- Human biological samples must be used only for purposes that are consistent with the consent obtained and in compliance with relevant laws and regulations
- Additional individual donor consent and ethics committee/IRB approval should be obtained when the research use intended is inconsistent with /beyond the scope of the original consent. Additional consent should also be obtained if the original consent did not include analysis of DNA (if relevant to the research proposal) or use of any associated medical information (if relevant to the research proposal).
- In general, cell lines (e.g. HeLa), derivatives (e.g. isolated proteins) and preparations of human biological materials (e.g. sub-cellular fractions) that are well established and made available for research use, do not require re- consent and/or ethics committee/IRB approval for the intended research use
- Proposals to collect, obtain, or use human embryonic or foetal samples for research should be carefully reviewed and such research must have the potential to benefit patients

Conduct and Public Disclosure of Human Subject Research

The Parties carry out human subject research in accordance with the ethical principles of respect for persons, beneficence, and justice. Such research conforms to high ethical, medical and scientific standards. Specific principles for different types of human subject research are set forth below.

All Human Subject Research

All human subject research must be conducted in accordance with the following principles:

- Human subject research is conducted in accordance with the ethical principles of respect for persons, beneficence and justice

- Human subject research always has a legitimate scientific purpose and is not designed with the objective of rewarding healthcare professionals for using, purchasing, recommending, or prescribing the Parties' products
- Sales/marketing/commercial staff generally does not participate in the initiation or conduct of human subject research
- Placebo controlled studies are conducted only when there are scientifically sound methodological reasons, where the risks are minimized and reasonable in relation to

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the knowledge gained, and when patients who receive placebo will not be subject to any additional risk of harm
- The standard of care required by the study design is, as a minimum, consistent with local standards of care
- Human subject research should be publicly disclosed and ideally published in the searchable, peer reviewed, scientific literature

In most circumstances, summary protocols and summary results of clinical studies are posted on publicly available registers and/or in the scientific literature within appropriate timelines.

- External proposals for additional analyses of human subject research studies are assessed for scientific merit and undertaken as collaborations between in-house scientists and the proposer.
- Clinical studies are never terminated for solely financial reasons.

Interventional Human Subject Research

In addition to the foregoing general principles applicable to all human subject research, the following principles apply to the conduct of Interventional Human Subject Research:

- Interventional human subject research is conducted in accordance with the ethical principles of the Declaration of Helsinki, the principles of ICH GCP E6, ICH El 1 (pediatrics)
- Interventional studies of medicinal and other products are conducted in countries where the products are expected to be sold in and suitable for the wider community of the country
- All interventional human subject research is conducted only with the approval of Institutional Review Boards or Independent Ethics Committees
- When interventional human subject research is conducted in developing countries, the Parties seek agreement with key interested external parties in the country on the conduct of the research, including the standard of care provided during the study, the scientific rationale for interventions, including placebo, the provision of healthcare for subjects after the study, and the fate of any capacity built for the conduct of the study
- All interventional human subject research requires the informed consent of subjects (or their legal representative) who participate in the research
- When nationally licensed medicinal products that are not the subject of the research study are required for the routine care of a patient during the conduct of the study, the Parties only fund these when they are not funded by the normal healthcare infrastructure and there is assurance that they or suitable alternatives will be available and funded after the study while the medical need exists
- For diseases/conditions that continue beyond the end of an interventional study, the Parties must be assured the healthcare system is able to provide, and will take responsibility for, the continued care of study subjects
- When there is a compelling medical rationale for patients who have derived measurable medical benefit from an investigational medicinal product during an interventional study

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to continue to receive that product after the study, the Parties endeavor to provide that treatment either through additional clinical studies or through expanded access programs
- The Parties provide investigators with the summary results of interventional studies in which they participate, and encourages investigators to inform their subjects of the results

Meta-analyses and Pooled Analyses

The following principles apply to research that uses data from more than one previously conducted clinical study (Meta-analyses and Pooled Analyses):

- Research utilizing data from the Parties' previous clinical studies in a manner inconsistent with, or beyond the scope of, the original informed consent requires re-consent of the subjects, or if this is not practical, IRB/IEC approval. If this is not practical, the data are anonymized
- The Parties review, before submission for publication, any proposed manuscripts, presentations or abstracts prepared by research collaborators which originate from the Parties human subject research studies (including the Parties supported studies)

Non-Interventional (observational) Human Subject Research

The following principles apply to Non-interventional (observational) human subject research:

- For observational studies where clinical data are collected by or on behalf of the Parties specifically for the purpose of the research, the Parties abide by the local legal requirements and regulations for informed consent for the use of these data and IRB/IECs approval is obtained
- For observational studies using healthcare databases, the Parties are assured that there is compliance with relevant legal requirements for data privacy and that patients have provided informed consent for the use of their data in research, or IRB/IEC approval has been obtained for that use; or other measures to protect privacy are in place (e.g. the data are anonymized)

Exhibit 10.15

Confidential treatment has been requested with respect to portions of this agreement as indicated by "[***]" and such confidential portions have been deleted and filed separately with the Securities and Exchange Commission pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

AMENDMENT 1 TO THE
INHALED COLLABORATION AND OPTION AGREEMENT

This Amendment no. 1 to the Agreement ("**Amendment**") is made effective as of the 13th day of May 2015 ("**Amendment Effective Date**") by and between:

LIQUIDIA TECHNOLOGIES, INC., a Delaware corporation, having its principal place of business at 419 Davis Dr., Suite 100, Morrisville, NC 27560 ("**Liquidia**") on the one part and;

GLAXO GROUP LIMITED, a company organized and existing under the laws of England and having an office and place of business at 980 Great West Road, Brentford, Middlesex TW8 9GS England ("**GSK**") on the other part.

WHEREAS, the Parties have entered into the INHALED COLLABORATION AND OPTION AGREEMENT, dated June 15th, 2012 ("**the Agreement**"); and

WHEREAS, the Parties wish to extend the Inhaled Collaboration Term on the terms provided herein.

NOW THEREFORE, in consideration of the foregoing premises and the mutual covenants and conditions contained in this Amendment, the Parties agree as follows:

1. All capitalized terms used but not defined herein have the meanings ascribed to them in the Agreement.

2. Section 3.3(a) of the Agreement is hereby deleted and replaced with the following:

   "Subject to the extensions provided in Sections 3.3(b) and (c), the term of the Inhaled Collaboration (the "**Inhaled Collaboration Term**") shall commence on the Effective Date and expire on December 15, 2015. Notwithstanding the foregoing, with respect to the Liquidia Respiratory Option and Respiratory Option Notice the initial Inhaled Collaboration Term of June 15, 2015 shall continue to control."

3. Section 4.2(b) of the Agreement is hereby deleted and replaced with the following:

   "GSK may exercise the Inhaled Option by providing written notice to Liquidia (the "**Inhaled Option Notice**") at any time before or upon the expiration of the Inhaled Collaboration Term (the "**Inhaled Option Period**"). Notwithstanding the foregoing, all final data and results generated by or on behalf of Liquidia

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   under the Inhaled Collaboration through June 15, 2015 shall be provided to GSK as soon as reasonably practicable to enable GSK to determine whether or not to exercise the Inhaled Option during the Inhaled Option Period."

4. As of the Amendment Effective Date, in accordance with Section 2.1(d)(iii), the JSC has approved an updated Inhaled Plan and associated budget setting forth the Collaboration Costs expected to be incurred by Liquidia in the performance thereof. The updated Inhaled Plan is attached hereto as **Appendix A**, and establishes the work to be performed by Liquidia and GSK from June 15, 2015 through September 9, 2015. For clarity, in accordance with Appendix A, (i) Liquidia will not transfer to, nor be obligated to transfer to GSK any Research Materials after June 15, 2015, up to the date GSK exercises the Inhaled Option and (ii) all activities by Liquidia and GSK stop on September 9, 2015, provided GSK has not exercised the Inhaled Option. Collaboration Costs incurred in connection with the Inhaled Plan attached as Appendix A shall be managed in accordance with the terms of the Agreement in force as of the Amendment Effective Date and which remain unchanged by this Amendment, except as provided in Section 8 below.

5. In partial consideration for Liquidia's agreement to manufacture GMP PRINT Materials prior to the exercise by GSK of the Inhaled Option, as well as additional activities regarding the ribavirin program set forth in the updated Inhaled Plan, GSK shall pay to Liquidia a one-time non-refundable payment of [***] Dollars ($[***]) (the "Amendment Payment") within 30 days after receipt of an invoice from Liquidia after the Amendment Effective Date, which invoice shall be sent in PDF format to [***] with a copy to the Alliance Manager. The Amendment Payment shall be payable by wire transfer of immediately available funds in accordance with wire transfer instructions of Liquidia provided in writing to GSK on or prior to the Amendment Effective Date.

6. The GMP PRINT Materials referred to in Section 5 above (the "Ribavirin PRINT Materials") will be manufactured, tested, packaged, stored, labeled, released and delivered in accordance with GMP, any specifications provided by GSK, the Quality Agreement and Technical Agreement to be entered into promptly after the Amendment Effective Date, and all applicable laws, and supplied in accordance with Section 3.5(c) of the Agreement; provided, that the Parties agree that the Ribavirin PRINT Materials will be shipped to GSK within five (5) days after Liquidia's receipt of the Inhaled Option Notice from GSK. For clarity, the Parties shall promptly negotiate in good faith the Development Supply Agreement in accordance with the Agreement, which shall be executed prior to any human dosing. Upon execution of the Development Supply Agreement, the terms of the Development Supply Agreement shall supersede

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the terms set forth above in this Section 6 with respect to the manufacture and supply of such Ribavirin PRINT Materials.

7. The payment for the milestone entitled "First dosing of First Patient in Phase I Clinical Trial" for a New Therapeutic is hereby reduced from Three Million Dollars ($3,000,000) to One Million Five Hundred Thousand Dollars ($1,500,000) solely with respect to the first achievement of such milestone by a New Therapeutic Product. For clarity, after this milestone is first time achieved by a New Therapeutic, it will thereafter be payable at three million Dollars ($3,000,000) in accordance with Section 10.4.

8. In the event that GSK terminates the Agreement in its entirety in accordance with Section 15.2, prior to expiration of the Inhaled Collaboration Term without exercising the Inhaled Option, then, in addition to the rights and obligations of the Parties as set forth in Article 15, the following provisions shall apply: (a) Liquidia shall cease all activities under the Inhaled Plan upon receipt of GSK's written notice of termination, and (b) GSK shall reimburse Liquidia for all Collaboration Costs incurred (including any non-cancellable Collaboration Costs set forth in the budget) for activities conducted through the date of notice of termination.

9. All references to "[***]" in Sections 10.2, 10.3(a), 10.3(b) and 10.4(d) shall be replaced with GSK's Alliance Manager.

10. All other terms of the Agreement will remain unchanged and in full force and effect.

IN WITNESS WHEREOF, THE PARTIES HAVE EXECUTED THIS AMENDMENT BY THEIR DULY AUTHORIZED OFFICERS AS OF THE EFFECTIVE DATE.

GLAXO GROUP LIMITED		**LIQUIDIA TECHNOLOGIES, INC.**	
By:	/s/ Paul Williamson	By:	/s/ Neal F. Fowler
Name:	Paul Williamson	Name:	Neal F. Fowler
Title:	Authorised Signatory	Title:	CEO

Appendix A

[***]

[Four pages omitted in their entirety]

Exhibit 10.20

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MANUFACTURING DEVELOPMENT AND SCALE-UP AGREEMENT

This Manufacturing Development and Scale-up Agreement (the "Agreement") is made as of March 19, 2012 (the "Effective Date"), between **Liquidia Technologies, Inc.**, a Delaware corporation ("Liquidia") having its principal place of business at Suite 100, 419 Davis Drive, Morrisville, NC 27560 and **Chasm Technologies, Inc.**, a Massachusetts corporation ("Chasm") with principal offices located at 85 Wagon Rd, Westwood, MA 02090.

Whereas; Chasm and Liquidia entered into a Consulting Services and License Agreement on 31 August 2006 (the "Chasm Consulting Agreement"), which was mutually terminated by the parties as of the Effective Date; and

Whereas; the parties desire to now enter a manufacturing development and scale-up agreement whereby Chasm wishes to assist Liquidia in scale-up and optimization of Liquidia's PRINT manufacturing capabilities.

In consideration of the mutual promises and agreements contained herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

1. Definitions. Capitalized terms used in this Agreement shall have the meanings specified in this Agreement. In addition, the following terms shall have the meanings below:

"Chasm Pre-Existing Intellectual Property" means Pre-Existing Intellectual Property owned or licensed by Chasm or its subcontractors.

"Deliverable" means any deliverable developed or prepared for Liquidia pursuant to this Agreement.

"Net Sales" means the worldwide gross receipts from sales to third parties of all Products, less all customary deductions actually paid using generally accepted accounting principles for i) trade, cash and quantity credits, discounts, refunds or rebates; ii) allowances or credits to customers actually granted on account of rejection, damage, or return of product; iii) sales commissions; iv) sales and excise taxes (including value added tax) and any other governmental charges imposed upon the production, importation, use or sale of product; and v) transportation charges, including insurance, for transporting product to the extent specifically invoiced to the customer.

"Pre-Existing Intellectual Property" means the data, information, tools, ideas, techniques, methodologies, specifications, documentation, notes and materials, including any patents, patent rights, copyrights, mask works, trade secrets and other intellectual property rights embodied therein, owned or controlled by a party prior to or independent of Chasm's performance under this Agreement, and whether or not used to produce, or embodied in, the Deliverables.

"Products" shall mean any particle or film fabricated in-whole or in-part under this Agreement.

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2. Activities To Be Performed.

2.1 Activities. Liquidia agrees to retain Chasm, and Chasm agrees to perform the services reasonably requested by Liquidia pursuant to the terms of this Agreement (the "Activities"). The Activities are to be performed by Chasm personnel and, subject to the prior written consent of Liquidia, not to be unreasonably withheld, Chasm subcontractors, including, utilization of the resources and any Chasm Pre-Existing Intellectual Property necessary or useful to complete the Activities.

2.2 Use of Subcontractors. Prior to entering into any subcontractor agreement, Chasm shall provide a copy, with the commercial terms redacted, of any such proposed subcontract to Liquidia and receive Liquidia's prior written approval, which shall not be unreasonably withheld. Any such agreement with subcontractors shall prohibit disclosure of Confidential Information and assign to Chasm all rights to any Liquidia Owned Intellectual Property developed by the subcontractor pursuant to this Agreement which Chasm shall thereafter assign to Liquidia as set forth in Sections 7.2, and require the subcontractor to license to Chasm all Subcontractor Pre-Existing Intellectual Property that is used in the Project or Deliverables which Chasm shall thereafter license to Liquidia in accordance with Sections 7.3a and 7.3b, as applicable.

2.3 Changes. This Agreement and any appendix or attachment may be changed only by an agreement in writing signed by an authorized representative of both parties.

2.4 Cooperation. Each party shall generally provide such cooperation as the other party reasonably requests regarding the Activities in accordance with customary business practices. Unless otherwise expressly agreed and as otherwise set forth in this Agreement, such cooperation shall be provided without cost to the other party.

2.5 Ownership of Equipment and Supporting Documentation. Liquidia shall own the entire right, title and interest to all equipment, machinery and supporting documents, plans and reports for the equipment and machinery created as a result of the performance of the Activities unless otherwise agreed to in writing. All material and information protectable by copyright are "works made for hire," as that term is defined in the 1976 Copyright Act as amended (title 17 of the United States Code).

3. Compensation, Royalties and Expenses. Liquidia's payment obligations to Chasm are limited to those expressly defined in the following Sections 3.1, 3.2 and 3.3.

3.1 Compensation. Liquidia agrees to pay Chasm for the Activities in accordance with the compensation schedule for the Activities in Appendix A.

3.2 Expenses. Liquidia agrees to reimburse Chasm for reasonable and necessary travel and out-of-pocket expenses incurred in connection with the performance of the

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Activities. Reimbursement by Liquidia shall be made within thirty days (30) after submission by Chasm to Liquidia of expense reports, with copies of supporting documentation.

3.3 Royalties; Advanced Minimum Royalties.

3.3 a. Advance Minimum Royalties. Upon execution of this Agreement Liquidia shall pay Chasm equal monthly installments of $[***] beginning on the first full month after the Effective Date and continuing for the next consecutive twenty (20) months for a total of $[***] as partial consideration for entering into this Agreement with the significant obligations required of Chasm ("Partial Prepayment of Future Royalties"). In addition, upon the first dosing of the first patient in the first Phase III clinical trial using a Product ("Phase III Initiation"), $400,000 shall become due to Chasm by Liquidia and payable by Liquidia to Chasm in equal monthly installments per month for the immediately following twelve (12) consecutive months. Together the above Partial Prepayment of Future Royalties of $[***] and Phase III Initiation payment of $400,000 shall be defined as the "Advanced Minimum Royalties", which shall apply as partial prepayment of future royalties and be credited against the Cumulative Royalties payable by Liquidia to Chasm hereunder.

3.3.b Future Royalties.

3.3.b.1. Liquidia shall pay to Chasm (i) a royalty of [***] percent ([***]%) of the Net Sales of all Products that incorporate, use, or result from using Liquidia Owned Intellectual Property (the "Sales Royalty") and (ii) a royalty of [***] percent ([***]%) of all license fees and royalties received by Liquidia, from a party other than Chasm or its subcontractors, for each sublicense of Liquidia Owned Intellectual Property (the "License Fee").

3.3.b.2 Notwithstanding the above, the License Fees in this Section 3.3.b shall not be triggered or become due for any sublicense in the context of research collaboration activities or licenses not related to commercialization activities.

3.3.c. During the term of this Agreement, the total maximum amount of monies to be paid by Liquidia to Chasm under this Agreement (which amount includes the Advanced Minimum Royalties, Sales Royalty, and License Fee) shall be $[***] ("Cumulative Royalties"). Upon Liquidia paying to Chasm the Cumulative Royalties, no further monies shall be due under this Agreement and the license grants in this Agreement shall become fully paid worldwide licenses according to their terms. For clarity, the Advanced Minimum Royalties, Sales Royalty, and License Fee aggregate toward the Cumulative Royalties, however the Cumulative Royalties do not include consulting fees or other service related compensation paid by Liquidia to Chasm under this Agreement.

3.4 Payment Terms. Liquidia shall pay each invoice set forth in the compensation schedule in Appendix A, in full, within thirty (30) days of Liquidia's receipt of an accurate and reasonable invoice. Any invoice payable by Liquidia which remains unpaid after the due date shall accrue interest at a rate of 1.0% per month. Liquidia shall be liable for all collection expenses incurred by Chasm for delinquent amounts, including without limitation reasonable attorneys' fees.

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3.5 Reports and Royalty Payments. Commencing upon the commercialization of the first Product triggering royalties under this Agreement, within thirty (30) days following the last day of each calendar quarter during the term, Liquidia shall deliver to Chasm a written report showing, in reasonable detail, the royalties owed by such party to the other party in such quarter accompanied by any royalty payments due and owing.

3.6 Audit Rights. Each party shall have the right to audit the relevant records of the other party upon reasonable notice and not more than once annually to verify compliance with the terms of this Agreement. Fees and expenses incurred in connection with such audits will be borne by the auditing party, unless such audit reveals that an error of five percent (5%) or more and at least $2,500, in any payment was made during any given quarter, in which case the fees and expenses incurred in connection with the audit during which such error was discovered will be borne by audited party. Any such audit shall occur during regular business hours, and shall not unreasonably interfere with regular business activities.

3.7 Records. During the term of the Agreement and for three (3) years after royalties are due and payable, each party shall maintain true and complete books and records related to all royalty sales and applications.

4. Work Rules. Chasm and Chasm's Representatives (as defined below) agree to comply with Liquidia's applicable work rules and regulations of which Chasm is informed in writing, including any security requirements while on Liquidia premises. Chasm and Chasm's Representatives further agree to comply with all applicable governmental regulations and abide by Liquidia's security requirements while on Liquidia premises.

Each party agrees that when its clients and Representatives are present on the premises of another party to this Agreement, they each shall comply with such rules and regulations as are notified to them for the conduct of individuals on those premises, and are subject to removal from the premises in the event they fail to comply with such rules.

Each party acknowledges and agrees that some of its employees, consultants, subcontractors or independent contractors will be performing work (the "Use Party") on each other party's (the "Location Owner") properties, including laboratories. Each party further acknowledges that the other parties perform work for other clients, including the U.S. Government, where security and confidentiality is an issue. Therefore, the Use Party agrees that it will, if directed by a Location Owner on whose property it is performing work, instruct the Use Party's staff, agents, officers, directors, employees, consultants, subcontractors or independent contractors (its "Representatives") who work on the Location Owner's property, to execute any additional confidentiality agreements or appropriate documents as are deemed reasonably necessary by the Location Owner.

5. Representations, Warranties and Covenants.

5.1 Compliance with Other Agreements. Chasm and Liquidia each represent to the other that to each Party's knowledge the execution of this Agreement, the performance of

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the obligations hereunder, and the licenses granted herein do not and will not conflict with, result in the breach or termination of any provisions, or constitute a default under, any agreement to which Chasm or Liquidia, as the case may be, is or may be bound.

5.2 Necessary Licenses. Chasm and Liquidia each represent and warrant to the other that to each Party's knowledge each has all necessary licenses from subcontractors and licensors to perform the Activities, and to complete the Deliverables in accordance with this Agreement.

5.3 Limited Warranty. Chasm represents and warrants that, to its knowledge and belief, (i) Chasm did not use or incorporate any proprietary subcontractor, or other third party, intellectual property into the deliverables generated and/or delivered to Liquidia under the Chasm Consulting Agreement; (ii) Liquidia has the freedom to practice the deliverables generated and/or delivered to Liquidia under the Chasm Consulting Agreement with respect to Chasm pre-existing intellectual property and any intellectual property Chasm developed under the Chasm Consulting Agreement; and (iii) Chasm has the skills and experience necessary to perform the Activities required under this Agreement and that it will use best efforts to the extent commercially reasonable, to perform said Activities in a professional, competent and timely manner.

5.4 Additional Representations, Warranties and Covenants.

5.4.1 All respective former and current employees and subcontractors of Chasm and Liquidia that have, have had, or will have access to confidential information have executed written agreements prohibiting disclosure of confidential information and assigning to each respective party, as applicable, all rights to any and all intellectual property, including inventions made during or derived from their relationship, to each respective party, as applicable.

5.4.2 Each Party has taken and will continue to take commercially reasonable precautions to protect the secrecy of its confidential information and trade secrets.

5.4.3 Neither Party has been alleged to infringe or misappropriate any intellectual property right of any other person or entity, there is no claim or action served or threatened, alleging any such infringement or misappropriation and neither party is aware of any such claim or action.

5.4.4 To the knowledge of the Parties, the operation of their respective businesses as presently conducted does not infringe or misappropriate any third-party intellectual property right.

5.4.5 Chasm represents that, to the best of its knowledge, neither it nor any of its personnel has been debarred, and to the best of its knowledge, is not under consideration to be debarred, by the U.S. Food and Drug Administration from working in or providing consulting services to any pharmaceutical or biotechnology company under the Generic Drug Enforcement Act of 1992.

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5.5 No Government Funding. Chasm covenants that none of the Activities performed by Chasm or its subcontractors under this Agreement shall be funded in whole or in part by any government entity.

5.6 Additional Covenants.

5.6.1 Prior to incorporating into its Deliverables any third party intellectual property of which Chasm is aware and that Chasm reasonably believes the manufacture, use, sale, offer to sell, importation or other exploitation of which would require Liquidia to obtain a further license, Chasm shall identify such third party intellectual property to Liquidia. Liquidia shall determine at its sole discretion and notify Chasm, within a commercially reasonably time, whether or not to incorporate such third party intellectual property into the Deliverable. If Liquidia notifies Chasm to incorporate such third party intellectual property, Liquidia shall be responsible for procuring the necessary license that would permit such third party intellectual property to be used in the Project and the Deliverable.

5.6.2 At times reasonably requested by Liquidia, Chasm shall produce to Liquidia a comprehensive list of: a) agreements related to intellectual property of which Chasm is aware and reasonably believes affects or may affect the Activities and/or the use of the Deliverables; and b) all agreements between Chasm employees and their former employers or clients of which Chasm is aware, after a reasonable investigation, and reasonably believes is related to intellectual property that affects or may affect the Activities and/or the use of the Deliverables. All such information and agreements transferred under this Agreement shall be treated as Chasm Confidential Information by Liquidia.

5.6.3 All future employees of Chasm, Chasm subcontractors, and Liquidia that will have access to Confidential Information will execute written agreements prohibiting disclosure of confidential information and assigning to each respective party, as applicable, all rights to any and all intellectual property, including inventions made during or derived from their relationship, to each respective party, as applicable.

5.7 Disclaimer. EXCEPT AS OTHERWISE STATED IN SECTIONS 5.1, 5.2, 5.3, 5.4, 5.5 AND 5.6 NEITHER PARTY MAKES ANY REPRESENTATIONS OR WARRANTIES, OF ANY KIND OR NATURE, WHETHER EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, TITLE OR NON-INFRINGEMENT.

6. Confidentiality.

6.1 Each party acknowledges that in the course of this Agreement it will receive information about, and access to, trade secrets and other confidential and proprietary information which is vital to the competitive position and success of the other party to this Agreement. The term "Confidential Information" as used throughout this Agreement shall mean with respect to a party, all proprietary information and technology of such party that is disclosed to the other party under this Agreement, whether disclosed in oral, written, graphic, or electronic form. Notwithstanding the foregoing, all information and technology generated under this

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Agreement, whether generated by one or both parties shall be deemed the Confidential Information of the party that owns such information and technology under the terms of this Agreement.

Except as expressly provided herein, the parties agree that, under this Agreement and for ten (10) years thereafter, each party will keep completely confidential and will not publish or otherwise disclose or use any Confidential Information of the other party except in connection with the activities contemplated by this Agreement without such other party's prior written consent, except for that portion of such information or materials that the receiving party can demonstrate by competent tangible proof:

(a) was already known or available to the receiving party, other than under an obligation of confidentiality or non-use to the other party, at the time of disclosure to the receiving party;

(b) was part of the public domain, at the time of its disclosure to the receiving party;

(c) became part of the public domain, after its disclosure to the receiving party through no fault of or breach of its obligations under this Agreement by the receiving party;

(d) was lawfully disclosed to the receiving party, other than under an obligation of confidentiality or non-use, by a third party rightfully in possession of the Confidential Information who had no obligation to the disclosing party not to disclose such information to others;

(e) was independently discovered or developed by or for the receiving party without access to, use of, reference to, or reliance upon Confidential Information belonging to the disclosing party; or

(f) is required to be disclosed pursuant to any applicable law, regulation, or legal order, provided that the receiving party has notified the disclosing party upon learning of the possibility that disclosure could be required pursuant to any such law, regulation, or legal order and has given the disclosing party a reasonable opportunity to contest or limit the scope of such required disclosure and has cooperated with the disclosing party toward this end.

Notwithstanding the above, specific aspects or details of Confidential Information will not be deemed to be within the public domain or in the prior possession of the receiving party merely because the aspects or details of the Confidential Information are embraced by general disclosures in the public domain. In addition, any combination of Confidential Information will not be considered in the public domain or in the prior possession of the receiving party merely because individual elements thereof are in the public domain or in the prior possession of the receiving party unless the combination is in the public domain or in the prior possession of the receiving party.

Each of the parties agrees that it shall provide Confidential Information received from the other party only to the receiving party's respective directors, officers, employees, agents, and financial and legal advisors who have a need to know such Confidential Information to assist the receiving party with the activities contemplated by this Agreement and are under written agreements of confidentiality at least as restrictive as those set forth in this Agreement.

6.2 Return of Confidential Information. Upon expiration or early termination of this Agreement, each party shall return or destroy all Confidential Information received by it

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from the other party. Notwithstanding the foregoing, each party shall be allowed to keep one (1) archival copy of any Confidential Information of the other party for record-keeping purposes only.

6.3 The Activities anticipated in this Agreement shall be performed by Representatives who may be retained by each party. Any individual who assists in the performance of the Activities anticipated herein shall, prior to providing any such assistance, have executed an agreement with its employer or contracting party that is a signatory to this Agreement with terms no less restrictive than the terms of this Agreement.

7. Intellectual Property Rights and Licenses

7.1 Each party shall own its Pre-Existing Intellectual Property. Liquidia and/or Chasm or Chasm subcontractors from time to time may invent and/or create and/or develop and/or license or otherwise acquire rights and/or interests in intellectual property in performing the Activities, including rights and interests in any inventions (whether patentable or not), trade secrets, know how, and works of authorship fixed in any tangible medium of expression, known or later developed, from which they can be perceived, reproduced, or otherwise communicated, whether directly or with the aid of a machine or device (whether registerable or not) in connection with performing the Activities under this Agreement ("New Project IP"); provided that New Project IP shall not include any Pre-Existing Intellectual Property.

7.2 With respect to New Project IP, Liquidia and Chasm agree that all right, title and interest in New Project IP shall be owned by Liquidia ("Liquidia Owned Intellectual Property"). Chasm agrees to assign and hereby does assign to Liquidia its entire right, title and interest to Liquidia Owned Intellectual Property including all of Chasms rights to bring suit and recover damages for past and future infringement.

7.3 a. Chasm grants Liquidia a perpetual, exclusive, sublicensable worldwide license, in accordance with the terms of this Agreement, to make, have made, use, offer to sell, sell, import, reproduce, prepare derivative works, and distribute Chasm Pre-Existing Intellectual Property solely as incorporated into the Activities and/or Deliverables for use or applications related to molded particles and harvested molded particles (the "Liquidia Permitted Exclusive Uses").

b. Chasm grants Liquidia a perpetual, non-exclusive, sublicensable worldwide license, in accordance with the terms of this Agreement, to make, have made, use, offer to sell, sell, import, reproduce, prepare derivative works, and distribute Chasm Pre-Existing Intellectual Property solely as incorporated into the Activities and/or Deliverables for any use or application with Liquidia's PRINT platform technology other than molded particles and harvested molded particles (the "Liquidia Permitted Non-exclusive Uses").

7.4 All sublicenses shall include terms to protect the confidentiality of Chasm Pre-Existing Intellectual Property with terms at least as restrictive as this Agreement.

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7.5 Chasm may cause the exclusive license granted in Section 7.3 to Liquidia Permitted Exclusive Uses to become non-exclusive when (a) after the fourth anniversary of the Phase III Initiation if the cumulative of the Advanced Minimum Royalties, Sales Royalty and License Fee paid by Liquidia to Chasm have not exceeded $1,000,000 and Liquidia has failed to bring such cumulative total payment to Chasm to $1,000,000 after thirty (30) days written notice from Chasm and (b) after the eighth anniversary of the Phase III Initiation if Liquidia has not paid Chasm the Cumulative Royalties and Liquidia has failed to satisfy the Cumulative Royalties after thirty (30) days written notice from Chasm.

8. Term and Termination.

8.1 Term. This Agreement is in effect from the Effective Date until the Activities are completed and accepted by Liquidia unless terminated earlier.

8.2 Termination.

8.2.1 Material Breach. Either party may, upon giving thirty (30) days written notice, terminate this Agreement for the other party's breach of any of its material obligations under this Agreement, provided that the breaching party shall not have cured such breach within the thirty (30) day notice period.

8.2.2 Either party may terminate this Agreement for its convenience upon giving sixty (60) days prior written notice to the other party.

8.2.3 Mutual Termination. The parties may agree to terminate this Agreement in a writing signed by both parties at any time prior to completion of the Activities.

8.3 Effect of Termination.

8.3.1 Upon termination of this Agreement, each party shall promptly return to the other party all Confidential Information of the other party and all equipment and products owned or controlled by the other party in its possession or under its control.

8.3.2 In the event of a material breach by Liquidia, all licenses granted to Liquidia shall terminate, provided Liquidia does not cure such breach within forty five (45) days following receipt of a detailed written notice of the breach by Chasm.

8.3.3 In the event of a material breach by Chasm, Liquidia shall pay Chasm for all reasonable out of pocket costs and expenses for Activities accepted through the termination date subject to a set-off by Liquidia of costs associated with Chasm's material breach and all licenses granted to Liquidia hereunder shall survive.

8.3.4 Should Liquidia terminate this Agreement under Section 8.2.2 for convenience, all Liquidia Owned Intellectual Property created as of the date of termination shall remain the property of Liquidia, all license rights and obligations created under this Agreement

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as of the date of termination shall survive the termination and Liquidia shall pay Chasm (a) reasonable costs and expenses incurred by Chasm under this Agreement through the termination date, and (b) the Advanced Minimum Royalties under Section 3.3 a.

8.3.5 Should the parties terminate this Agreement under Section 8.2.3 for mutual convenience, all Liquidia Owned Intellectual Property created as of the date of termination shall remain the property of Liquidia, all license rights and obligations created under this Agreement as of the date of termination shall survive the termination and Liquidia shall pay Chasm reasonable costs and expenses incurred by Chasm under this Agreement through the termination date.

8.3.6 For the avoidance of doubt, the Parties acknowledge that Liquidia's ownership rights with respect to Liquidia Owned Intellectual Property is and shall be irrevocable and unaffected by any expiration or termination of this Agreement for any reason.

8.4 Survival. Sections 2.5, 3.3-3.7, 5, 6, 7, 8.3, 8.4, 9-15, and 18-19 shall survive the expiration or termination of this Agreement.

9. Specific Performance. Chasm and Liquidia each recognizes that irreparable injury may be caused to the other by its violation or material breach of Sections 6-7 of this Agreement, and Chasm and Liquidia each agrees that, in the event of any such violation, in addition to such other rights and remedies as may exist under this Agreement, the other may apply to any court of law or equity having jurisdiction to enforce the specific performance of the provisions hereof, and may apply for injunctive relief against any act which would violate any such provisions.

10. Limitation on Liability. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, NEITHER PARTY SHALL BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, PUNITIVE OR SPECIAL DAMAGES (INCLUDING LOSS OF PROFITS, DATA, BUSINESS OR GOODWILL), REGARDLESS OF WHETHER SUCH LIABILITY IS BASED ON BREACH OF CONTRACT, TORT, STRICT LIABILITY, BREACH OF WARRANTIES, FAILURE OF ESSENTIAL PURPOSE OR OTHERWISE, AND EVEN IF ADVISED OF THE LIKELIHOOD OF SUCH DAMAGES. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, THE LIABILITY OF CHASM FOR DIRECT DAMAGES, REGARDLESS OF WHETHER SUCH LIABILITY IS BASED ON BREACH OF CONTRACT, TORT, STRICT LIABILITY, BREACH OF WARRANTIES, FAILURE OF ESSENTIAL PURPOSE OR OTHERWISE, UNDER THIS AGREEMENT OR WITH RESPECT TO THE ACTIVITIES SHALL IN NO EVENT EXCEED THE AGGREGATE AMOUNT OF FEES WHICH CHASM RECEIVES IN CONNECTION WITH THIS AGREEMENT. THESE LIMITATIONS ARE INDEPENDENT OF ALL OTHER PROVISIONS OF THIS AGREEMENT AND SHALL APPLY NOTWITHSTANDING THE FAILURE OF ANY REMEDY PROVIDED HEREIN.

11. Independent Contractor. Chasm and Liquidia agree that Chasm shall provide the Activities to Liquidia solely as an independent contractor. This Agreement is not intended to and should not be deemed to create an employment or principal-agent relationship or joint venture between Chasm, or any of its employees or contractors, and Liquidia, and neither party shall

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have the right, power or authority to obligate, commit or incur any liability on behalf of the other party or to otherwise act in any way as an agent or representative of the other party or bind the other in any manner whatsoever.

12. Bankruptcy. The licenses granted in this Agreement ("Licenses") are licenses for intellectual property, as such term is defined in Section 101 of Title 11 of the United States Code (the "Bankruptcy Code"). The parties acknowledge and agree that, upon the filing of a petition for relief under the Bankruptcy Code by or against the Grantor (a "Filing"), whether such Filing is voluntary or involuntary, it is intended that this Agreement and the Licenses shall be subject to the provisions of Section 365(n) of the Bankruptcy Code, and, as such, the parties shall retain and may fully exercise all of its rights and elections provided thereunder. In the event of a Filing, the parties shall, promptly upon written request by the other party, comply with the provisions of Section 365(n) of the Bankruptcy Code, including subsections (3) and (4) thereof.

13. Severability. In the event any provision of this Agreement, in whole or in part, is invalid, unenforceable or in conflict with the applicable laws or regulations of any jurisdiction, such provision will be replaced, to the extent possible, with a provision which accomplishes the original business purposes of the provision in a valid and enforceable manner, and the remainder of this Agreement will remain unaffected and in force provided, however, that if without such invalid or unenforceable provision the fundamental mutual objectives of the parties cannot be achieved, either party may terminate this Agreement without penalty by written notice to the other.

14. Governing Law; Headings; Counterparts. This Agreement shall be governed by and interpreted according to the laws of the State of Delaware without regard for any choice or conflict of laws rule or provision that would result in the application of the substantive law of any other jurisdiction. The headings of the several sections are for convenience only and are not intended to be part of or to affect the meaning or interpretation of this Agreement. This Agreement may be executed in counterparts (all of which counterparts shall constitute one and the same agreement) and may be executed by facsimile transmission.

15. Assignment; Successors & Assigns. This Agreement and the rights and obligations hereunder may not be assigned in whole or in part by any party and any such assignment shall be null and void; provided, however, that an assignment may be made by any party to the surviving entity of a merger or acquisition of substantially all of the assets of such party. This Agreement shall bind and inure to the benefit of all parties to this Agreement and their respective successors and permitted assigns.

16. Force Majeure. Neither party will be liable for any delays or failures in performance due to circumstances beyond its reasonable control. In the event that either party is prevented from performing due to causes beyond its control, such party shall notify the other party, explaining the cause for same and the dates or times for performance shall be extended for the period of the delay and a reasonable additional time.

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17. Entire Agreement; Waiver. This Agreement together with the appendices and attachments thereto, sets forth the entire agreement between the parties concerning the transactions and arrangements contemplated hereby, and supersede all prior oral or written arrangements or agreements. This Agreement may be amended only by an instrument in writing signed by both parties and may be waived only by an instrument in writing signed by the party against whom enforcement of the waiver is sought. The waiver by either party of any breach of this Agreement on one occasion shall not operate or be construed as a waiver of any other breach on another occasion.

18. Remedies. Except as expressly provided herein, the remedies provided in this Agreement are not and shall not be deemed to be exclusive and shall be in addition to any other remedies that a Party may have at law or in equity.

19. Publicity. Other than with respect to any internal reports or reporting to federal, state, and local authorities for purposes of compliance with legal reporting requirements (such as, for example, any appropriate reporting to the U.S. Securities & Exchange Commission), neither Party shall, without the express written consent of the other Party, use the name or mark of the other Party in transacting business or issue any public reports, statements, or releases pertaining to the transaction contemplated by this Agreement.

IN WITNESS WHEREOF, Liquidia and Chasm have duly executed this Agreement as of the Effective Date.

Chasm Technologies, Inc.		**Liquidia Technologies, Inc.**	
By:	*/s/ Robert F. Praino*	By:	*/s/ Bruce Boucher*
Name:	Robert F. Praino	Name:	Bruce Boucher
Title:	Co-Founder	Title:	President & CFO

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APPENDIX A

COMPENSATION SCHEDULE

Components of cost:

- Consulting Activities rate will be $[***] per hour for the services of [***] and $[***] per hour for all others. It is expected that the workload related to this charge will be as needed as specified by Liquidia.
- Engineering rates (other subcontractors as required) will be based on the specific resource engaged (e.g. mechanical design, electrical design, third party analytical services, machine shops, etc.).
- Equipment enhancements or fabrication will be funded by Liquidia.
- Travel expenses for Chasm and/or sub-contractors will be pre-approved and funded by Liquidia.