As filed with the Securities and Exchange Commission on June 1, 2018.

Registration No. 333-225213

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

AMENDMENT NO. 1
TO
FORM S-1
REGISTRATION STATEMENT

Under

The Securities Act of 1933

AVROBIO, INC.

(Exact name of registrant as specified in its charter)

Delaware	**2836**	**81-0710585**
(State or other jurisdiction of incorporation or organization)	**(Primary Standard Industrial Classification Code Number)**	**(I.R.S. Employer Identification Number)**

One Kendall Square
Building 300, Suite 201
Cambridge, MA 02139
(617) 914-8420

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Geoff MacKay
President and Chief Executive Officer
One Kendall Square
Building 300, Suite 201
Cambridge, MA 02139
(617) 914-8420

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Arthur McGivern, Esq. **James Xu, Esq.** **Goodwin Procter LLP** **100 Northern Avenue** **Boston, Massachusetts 02210** **(617) 570-1000**	**Katina Dorton** **AVROBIO, Inc.** **One Kendall Square** **Building 300, Suite 201** **Cambridge, Massachusetts 02139** **(617) 914-8420**	**Patrick O'Brien, Esq.** **Ropes & Gray LLP** **Prudential Tower** **800 Boylston Street** **Boston, Massachusetts 02199** **(617) 951-7000**

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, as amended, check the following box. ☐

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

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

If this form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large Accelerated Filer	☐	Accelerated Filer	☐
Non-Accelerated Filer	☒ (Do not check if a smaller reporting company)	Smaller Reporting Company	☐
		Emerging Growth Company	☒

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

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 $0.0001 per share	86,250,000	$10,739

(1) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(o) under the Securities Act of 1933, as amended.
(2) Includes the offering price of shares that the underwriters may purchase pursuant to an option to purchase additional shares.
(3) Previously paid.

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 that specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until this registration statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

EXPLANATORY NOTE

AVROBIO, Inc. is filing this Amendment No. 1 (this "Amendment") to its Registration Statement on Form S-1 (Registration No. 333-225213) (the "Registration Statement") to file certain exhibits to the Registration Statement as indicated in Item 16 in the index to exhibits. Accordingly, this Amendment consists only of the facing page, this explanatory note, Part II of the Registration Statement, the signature page to the Registration Statement and the filed exhibits. Part I of the Registration Statement is unchanged and has therefore been omitted.

PART II

Information Not Required in Prospectus

Item 13. Other Expenses of Issuance and Distribution.

The following table sets forth the fees and expenses, other than underwriting discounts and commissions, payable in connection with the registration of the common stock hereunder. All amounts are estimates except the SEC registration fee.

	AMOUNT
SEC registration fee	$ 10,739
FINRA filing fee	13,438
Nasdaq Global Market listing fee	*
Printing and mailing	*
Legal fees and expenses	*
Accounting fees and expenses	*
Transfer agent and registrar fees and expenses	*
Miscellaneous	*
Total	$ *

* To be completed by amendment.

Item 14. Indemnification of Directors and Officers.

Section 145 of the Delaware General Corporation Law, or the DGCL, authorizes a corporation to indemnify its directors and officers against liabilities arising out of actions, suits and proceedings to which they are made or threatened to be made a party by reason of the fact that they have served or are currently serving as a director or officer to a corporation. The indemnity may cover expenses (including attorneys' fees) judgments, fines and amounts paid in settlement actually and reasonably incurred by the director or officer in connection with any such action, suit or proceeding. Section 145 permits corporations to pay expenses (including attorneys' fees) incurred by directors and officers in advance of the final disposition of such action, suit or proceeding. In addition, Section 145 provides that a corporation has the power to purchase and maintain insurance on behalf of its directors and officers against any liability asserted against them and incurred by them in their capacity as a director or officer, or arising out of their status as such, whether or not the corporation would have the power to indemnify the director or officer against such liability under Section 145.

We have adopted provisions in our certificate of incorporation and bylaws to be in effect upon the closing of this offering that limit or eliminate the personal liability of our directors to the fullest extent permitted by the DGCL, as it now exists or may in the future be amended. Consequently, a director will not be personally liable to us or our stockholders for monetary damages or breach of fiduciary duty as a director, except for liability for:

- any breach of the director's duty of loyalty to us or our stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- any unlawful payments related to dividends or unlawful stock purchases, redemptions or other distributions; or
- any transaction from which the director derived an improper personal benefit.

These limitations of liability do not alter director liability under the federal securities laws and do not affect the availability of equitable remedies such as an injunction or rescission.

In addition, our bylaws provide that:

- we will indemnify our directors, officers and, in the discretion of our board of directors, certain employees to the fullest extent permitted by the DGCL, as it now exists or may in the future be amended; and
- we will advance reasonable expenses, including attorneys' fees, to our directors and, in the discretion of our board of directors, to our officers and certain employees, in connection with legal proceedings relating to their service for or on behalf of us, subject to limited exceptions.

We have entered into indemnification agreements with each of our directors and intend to enter into such agreements with our executive officers. These agreements provide that we will indemnify each of our directors, certain of our executive officers and, at times, their affiliates to the fullest extent permitted by Delaware law. We will advance expenses, including attorneys' fees (but excluding judgments, fines and settlement amounts), to each indemnified director or executive officer in connection with any proceeding in which indemnification is available and we will indemnify our directors and officers for any action or proceeding arising out of that person's services as a director or officer brought on behalf of us or in furtherance of our rights. Additionally, certain of our directors or officers may have certain rights to indemnification, advancement of expenses or insurance provided by their affiliates or other third parties, which indemnification relates to and might apply to the same proceedings arising out of such director's or officer's services as a director referenced herein. Nonetheless, we have agreed in the indemnification agreements that our obligations to those same directors or officers are primary and any obligation of such affiliates or other third parties to advance expenses or to provide indemnification for the expenses or liabilities incurred by those directors are secondary.

We also maintain general liability insurance which covers certain liabilities of our directors and officers arising out of claims based on acts or omissions in their capacities as directors or officers, including liabilities under the Securities Act of 1933, as amended, or the Securities Act.

The underwriting agreement filed as Exhibit 1.1 to this registration statement provides for indemnification of us and our directors and officers by the underwriters against certain liabilities under the Securities Act and the Securities Exchange Act of 1934.

Item 15. Recent Sales of Unregistered Securities.

In the three years preceding the filing of this registration statement, we have issued the following securities that were not registered under the Securities Act:

(a) Issuances of Capital Stock

In November 2015, we sold an aggregate of 5,200,000 shares of common stock to our three founders and a consultant for nominal value.

In January 2016, we sold an aggregate of 4,800,000 shares of common stock to one stockholder for nominal value.

In January 2016, we sold an aggregate of 3,333,333 shares of our Series Seed preferred stock to one investor for aggregate consideration of approximately $1.5 million.

In July 2016, with subsequent closings in March 2017 and October 2017, we sold an aggregate of 31,450,499 shares of our Series A preferred stock to 4 investors for aggregate consideration of approximately $25 million.

In January 2018, we sold an aggregate of 28,285,557 shares of our Series B preferred stock to 15 investors for aggregate consideration of approximately $60.5 million and issued an additional 233,765 shares of our Series B preferred stock to one investor as partial consideration under a license agreement.

No underwriters were involved in the foregoing sales of securities. The sales of securities described above were deemed to be exempt from registration pursuant to Section 4(a)(2) of the Securities Act, including Regulation D and Rule 506 promulgated thereunder, as transactions by an issuer not involving a public offering. All of the purchasers in these transactions represented to us in connection with their purchase that they were acquiring the securities for investment and not distribution, that they could bear the risks of the investment and could hold the securities for an indefinite period of time. Such purchasers received written disclosures that the securities had not been registered under the Securities Act and that any resale must be made pursuant to a registration or an available exemption from such registration. All of the foregoing securities are deemed restricted securities for the purposes of the Securities Act.

(b) Grants and Exercises of Stock Options and Restricted Stock Awards

We have granted stock options to purchase an aggregate of 7,391,214 shares of our common stock, with exercise prices ranging from $0.01 to $1.21 per share, to employees, directors and consultants pursuant to the Amended and Restated 2015 Stock Option and Grant Plan, or the 2015 Plan. No shares of common stock have been issued upon the exercise of stock options pursuant to the 2015 Plan.

In April 2016, we issued an aggregate of 666,667 shares of restricted stock to one employee under the 2015 Plan.

The issuances of the securities described above were deemed to be exempt from registration pursuant to Section 4(a)(2) of the Securities Act or Rule 701 promulgated under the Securities Act as transactions pursuant to compensatory benefit plans. The shares of common stock issued upon the exercise of options are deemed to be restricted securities for purposes of the Securities Act.

(c) Issuance of Warrant

In June 2017, we issued a warrant to purchase an aggregate of 28,305 shares of our Series A preferred stock, with an exercise price of $0.7949 per share, to Silicon Valley Bank. No shares of Series A preferred stock have been issued upon the exercise of this warrant. The issuance of this warrant was deemed to be exempt from registration pursuant to Section 4(a)(2) of the Securities Act.

Item 16. Exhibits and Financial Statement Schedules.

EXHIBIT NO.	EXHIBIT INDEX
1.1*	Form of Underwriting Agreement
3.1**	Third Amended and Restated Certificate of Incorporation of the Registrant, as currently in effect
3.2*	Amendment to Third Amended and Restated Certificate of Incorporation of the Registrant (to be adopted prior to the effectiveness of this registration statement)
3.3*	Form of Fourth Amended and Restated Certificate of Incorporation of the Registrant (to be effective upon the closing of this offering)
3.4**	By-laws of the Registrant, as currently in effect
3.5*	Form of Amended and Restated By-laws (to be effective upon the closing of this offering)
4.1*	Form of Specimen Common Stock Certificate
4.2**	Second Amended and Restated Investors' Rights Agreement among the Registrant and certain of its stockholders, dated January 9, 2018
4.3**	Warrant to Purchase Stock issued to Silicon Valley Bank, dated June 23, 2017

EXHIBIT NO.	EXHIBIT INDEX
5.1**	Form of Opinion of Goodwin Procter LLP (final opinion to be filed by amendment)
10.1#**	2015 Amended and Restated Stock Option and Grant Plan, as amended, and forms of award agreements thereunder
10.2#*	2018 Stock Option and Incentive Plan and forms of award agreements thereunder (to be effective upon the effectiveness of this registration statement)
10.3#*	Senior Executive Cash Incentive Bonus Plan
10.4#*	Form of Indemnification Agreement
10.5†	Exclusive License Agreement, by and between the Registrant and University Health Network, dated November 4, 2016, as amended
10.6†	License Agreement, by and between the Registrant and BioMarin Pharmaceutical Inc., dated August 31, 2017
10.7†**	Exclusive License Agreement, by and among the Registrant, Stefan Karlsson and Maria Dahl, dated January 30, 2017
10.8†**	License Agreement, by and between the Registrant and GenStem Therapeutics, Inc., dated October 2, 2017
10.9#*	Amended and Restated Employment Agreement, by and between the Registrant and Geoff MacKay (to be entered into in connection with this offering)
10.10#*	Amended and Restated Employment Agreement, by and between the Registrant and Nerissa Kreher, M.D. (to be entered into in connection with this offering)
10.11#*	Amended and Restated Employment Agreement, by and between the Registrant and Katina Dorton (to be entered into in connection with this offering)
10.12**	Lease Agreement, dated as of January 12, 2018, by and between the Registrant and ARE-MA Region No. 59, LLC
10.13**	Loan and Security Agreement, by and among the Registrant and Silicon Valley Bank, dated June 23, 2017
10.14#*	2018 Employee Stock Purchase Plan (to be effective upon the effectiveness of this registration statement)
21.1**	Subsidiaries of the Registrant
23.1**	Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm
23.2*	Consent of Goodwin Procter LLP (included in Exhibit 5.1)
24.1**	Power of Attorney (included in page II-6)

* To be included by amendment
** Previously filed
† Application has been made to the Securities and Exchange Commission for confidential treatment of certain provisions. Omitted material for which confidential treatment has been requested has been filed separately with the Securities and Exchange Commission.
# Indicates a management contract or any compensatory plan, contract or arrangement

Item 17. Undertakings.

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

The Registrant hereby undertakes that:

(a) 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.

(b) For purposes of determining any liability under the Securities Act of 1933, as amended, the information omitted from a form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in the form of prospectus filed by the Registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act of 1933, as amended, shall be deemed to be part of this registration statement as of the time it was declared effective.

(c) For the purpose of determining any liability under the Securities Act of 1933, as amended, 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, the registrant has duly caused this Registration Statement on Form S-1 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Cambridge, Commonwealth of Massachusetts, on the 1st day of June, 2018.

AVROBIO, INC.

By: /s/ Geoff MacKay
Geoff MacKay
President, Chief Executive Officer, and Principal Executive Officer

POWER OF ATTORNEY AND SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement and Power of Attorney has been signed by the following person in the capacities and on the date indicated.

NAME	TITLE	DATE
/s/ Geoff MacKay Geoff MacKay	*Director, President, Chief Executive Officer, and Principal Executive Officer*	June 1, 2018
* Katina Dorton	*Chief Financial Officer and Principal Financial and Accounting Officer*	June 1, 2018
* Bruce Booth, D.Phil.	*Chairman of the Board of Director*s	June 1, 2018
* Ian T. Clark	*Director*	June 1, 2018
* Annalisa Jenkins, M.B.B.S., F.R.C.P	*Director*	June 1, 2018
* Christopher Paige, Ph.D.	*Director*	June 1, 2018
* Scott G. Requadt	*Director*	June 1, 2018
* Joshua Resnick, M.D.	*Director*	June 1, 2018

*By: /s/ Geoff MacKay
Geoff MacKay
Attorney-in-fact

CERTAIN CONFIDENTIAL PORTIONS OF THIS EXHIBIT WERE OMITTED AND REPLACED WITH "[***]". A COMPLETE VERSION OF THIS EXHIBIT HAS BEEN FILED SEPARATELY WITH THE SECRETARY OF THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO AN APPLICATION REQUESTING CONFIDENTIAL TREATMENT PURSUANT TO RULE 406 PROMULGATED UNDER THE SECURITIES ACT OF 1933, AS AMENDED.

EXCLUSIVE LICENSE AGREEMENT

This Exclusive License Agreement (this "**Agreement**") is made effective as of November 4, 2016 (the "**Effective Date**") between:

> **UNIVERSITY HEALTH NETWORK**, an Ontario corporation incorporated by special statute under the *University Health Network Act, 1997*, having a principal office at 190 Elizabeth Street, R. Fraser Elliott Building—Room 1S-417, Toronto, Ontario M5G 2C4 ("**UHN**")
>
> -AND-
>
> **AvroBio**, **Inc**., a Delaware corporation, with offices at 400 Technology Square, 10th Floor, Cambridge, MA 02139 ("**Avro**")

In this Agreement, UHN and Avro may be referred to individually as a "**Party**", or collectively as the "**Parties**".

BACKGROUND:

UHN principal investigator Dr. Jeffrey Medin (the "**Principal Investigator**"**;** as further defined below) has created, conceived or developed compositions and methods for use in the treatment of Fabry disease.

UHN owns and controls certain intellectual property rights relating to the treatment of Fabry disease.

Avro wishes to license from UHN rights under such intellectual property rights so as to allow Avro to research, develop, manufacture and commercialize products in accordance with the following terms and conditions.

UHN and Avro entered into an option agreement, dated as of January 27, 2016, pursuant to which UHN exclusively optioned to Avro the right to exclusively license all UHN owned or controlled intellectual property rights relating to UHN developed compositions and methods for use in the treatment of Fabry disease (the "**Option Agreement**").

The parties wish to enter into this Agreement in accordance with the terms and conditions set forth herein.

ARTICLE 1 - INTERPRETATION

1.1 **Defined Terms**. For the purposes of this Agreement, the following terms shall have the respective meanings set out below and grammatical variations of such terms shall have corresponding meanings:

1.1.1 "**Affiliate**" means, with respect to any Person, a Person directly or indirectly controlled by, controlling, or under common control with such Person. For the purposes of this definition, except as otherwise expressly set out in this Agreement, "control" means (a) direct or indirect beneficial ownership of at least fifty percent (50%) of the voting stock of such Person or (b) with the power to direct the management and policies of such entities.

1.1.2 "**Agreement**" means this Exclusive License Agreement, and all of its Schedules, and the terms "herein", "hereunder", "hereto" and such similar expressions shall refer to this Agreement.

1.1.3 "**Avro Insurance**" shall have the meaning provided in Section 13.1.

1.1.4 "**Calendar Year**" means each twelve (12) month period beginning on January 1 and each subsequent anniversary thereof; provided, however, that (a) the first Calendar Year of this Agreement will commence on the Effective Date and end on December 31 of the same year, and (b) the last Calendar Year of this Agreement will commence on January 1 of the Calendar Year in which this Agreement terminates or expires and end on the date of expiration or termination of this Agreement.

1.1.5 "**Claims**" shall have the meaning provided in Section 12.1.

1.1.6 "**Clinical Trial Application**" or "**CTA**" has the meaning accorded this term in accordance with the requirements of Health Canada, including all amendments and supplements to such application, or any IND or other equivalent filing with any other Regulatory Authority.

1.1.7 "**Clinical Trial Data**" means all Patient Data generated from the one or more of the clinical trial sites (including UHN, Calgary and Halifax), but excludes Sample Processing Data. For greater certainty, investigator suspected adverse events are not separately identified within the Clinical Trial Data, but are reviewed in accordance with the Clinical Trial Protocol and reported to Avro in accordance with obligations as outlined in Sections 2.4.4 to 2.4.6.

1.1.8 "**Clinical Trial Protocol**" means the protocol governing the UHN Planned Trial. The Clinical Trial Protocol may be amended from time to time by agreement of the Parties subject to funding being available to support the costs of changes as required by the amendment.

1.1.9 "**Combination Product**" means a Licensed Product sold or used in combination with one or more other products which are not Licensed Products.

1.1.10 "**Confidential Information**" of a Party means any and all confidential or proprietary information of and disclosed by or on behalf of a Party and/or any of its Affiliates (a "**Disclosing Party**") which has or does come into the possession or knowledge of the other Party and/or any of its Affiliates (a "**Receiving Party**") in connection with or as a result of entering into this Agreement and which is (a) marked as confidential or identified as confidential at the time of disclosure, or (b) given the nature of the information or circumstances of disclosure, would be recognized as confidential or proprietary by a reasonable person, in each case including information concerning the Disclosing Party's past, present and future business, research and development, technology, customers and suppliers.

Information shall not be considered "Confidential Information" to the extent that the information:

(a) is part of the public domain at the time of disclosure,

(b) subsequently becomes part of the public domain through no act or fault of the Receiving Party or its Representatives in violation of this Agreement,

(c) can be demonstrated by the Receiving Party's written records or other credible evidence to have been known or otherwise

(d) available to the Receiving Party prior to the disclosure by the Disclosing Party,

(e) can be demonstrated by the Receiving Party's written records or other credible evidence, to have been provided to the Receiving Party, without restriction, by a Third Party who is not under a duty of confidentiality respecting the information disclosed,

(f) can be demonstrated by the Receiving Party's written records, or other credible evidence, to have been independently developed by or on behalf of the Receiving Party without use of or reference to the disclosed Confidential Information, or

(g) is identified in writing by the Disclosing Party as no longer constituting Confidential information.

1.1.11 "**Disclosing Party**" shall have the meaning provided in Section 1.1.10.

1.1.12 "**Exclusively Licensed Know-How**" means (a) any and all Fabry Know-How, (b) any and all Licensed Trial Related Data, and (c) the Clinical Trial Protocol.

1.1.13 "**Fabry Know-How**" means any and all Know-How (A) existing as of the Effective Date that (i) was created, conceived or developed by (1) the Principal Investigator; (2) by UHN employees or agents under the direction or supervision of the Principal Investigator, or (3) the UHN CRO; (ii) is owned or controlled by UHN and (iii) is listed or otherwise defined in Schedule "A", or Schedule "B", or (B) existing as of the Effective Date or during the Term that was (i) created, conceived or developed by one or more third party(ies) in collaboration with UHN or the Principal Investigator (or UHN employees or agents of UHN under the direction or supervision of the Principal Investigator) in connection with the UHN Planned Trial and for which UHN has been granted exclusive rights pursuant to a Fabry Trial Team Agreement. In the event that there exists as of the Effective Date other Know-How which is (a) relevant to the Field of Use, (b) created, conceived or developed by (1) the Principal Investigator, (2) by UHN employees or agents under the direction or supervision of the Principal Investigator, or (3) the UHN CRO, and (c) owned or controlled by UHN and is not Improved Therapies Know-How, the Parties will update Schedule A and/or Schedule B accordingly. For greater certainty Fabry Know-How does not include Fabry Patents, Improved Therapies Patents or Improvement Patents or any Patent Rights in the SRA Intellectual Property.

1.1.14 "**Fabry Non-Exclusive Know-How**" means any and all Know-How existing as of the Effective Date or during the Term that was created, conceived or developed by one or more third party(ies) in collaboration with the Principal Investigator (or UHN employees or agents of UHN under the direction or supervision of the Principal Investigator) in connection with the UHN Planned Trial and for which UHN has been granted non-exclusive rights pursuant to a Fabry Trial Team Agreement.

1.1.15 "**Fabry Patents**" means (a) the patents and patent applications listed on Schedule "C", (b) any Canadian or U.S. or other foreign patent application corresponding or claiming priority to the patents and applications listed in Schedule "C", and all patents issuing therefrom, (c) all divisionals, continuations and continuations-in part applications to the patents and applications listed in Schedule "C", and all patents issuing therefrom, with the proviso that any continuations-in-part applications and/or patents shall only apply to claims that are directed to subject matter specifically described in any patent or patent application described in clauses (a) or (b); (d) all foreign counterparts of any of the patents or applications in clauses (a), (b), and (c) (including, without limitation, any European Supplementary Protection Certificates or equivalents), and all patents issuing therefrom; and (e) all patents of addition, reissues, renewals, and/or extensions of any of the patents or patent applications set out in any of clauses (a), (b), (c), or (d), but excluding any patents or patent applications listed as "Excluded Patents" on Schedule C.

1.1.16 "**Fabry Vector**" means the Lentiviral a-Gal A expression vector utilized in the UHN Planned Trial.

1.1.17 "**Fabry Trial Team**" means the principal investigators in their appointment and capacity as investigators of their respective Fabry Trial Team Institution(s).

1.1.18 "**Fabry Trial Team Institution(s)**" means each of the institutions involved in the UHN Planned Trial. As of the Effective Date, the Fabry Trial Team Institutions include Hamilton Regional Laboratory Medicine Program ("Hamilton Service"), Hamilton Health Sciences Corporation ("Hamilton Clinical"), Universite de Sherbrooke ("Sherbrooke"), The Governors of the University of Calgary in conjunction with Alberta Health Services (collectively "Calgary"), London Health Sciences Centre ("London"), and Nova Scotia Health Authority ("Halifax"). The list of Fabry Trial Team Institutions(s) may be amended by agreement of the Parties.

1.1.19 "**Fabry Trial Team Agreement(s)**" means any agreement(s) to be entered into between Fabry Trial Team Institutions, UHN, and Avro governing, among other items, the transfer of certain Exclusively Licensed Know-How and Non-Exclusively Licensed Know-How from the Fabry Trial Team Institutions to UHN and Avro. The Fabry Trial Team Agreement(s) may be amended from time to time by agreement of the Parties.

1.1.20 "**FDA**" means the United States Food and Drug Administration and any successor agency thereto.

1.1.21 "**Field of Use**" means Fabry disease.

1.1.22 "**First Commercial Sale**" means, with respect to a Licensed Product and a country, the first arms-length commercial sale for monetary value of such Licensed Product to a Third Party in such country after Regulatory Approval allowing for the marketing and sale of such Licensed Product has been obtained in such country. Sales prior to receipt of Regulatory Approval for such Licensed Product, such as so-called "treatment IND sales," "named patient sales", "Health Canada Special Access Programme sales" and "compassionate use sales" shall not be construed as a First Commercial Sale.

1.1.23 "**Gross Revenue**" means the gross amount received by each of: (a) Avro and/or its Affiliates, and (b) any permitted Sublicensee, where such gross amount is received in respect of the sale or transfer or other disposition of a Licensed Product to a Third Party.

1.1.24 "**IL-12 Agreement**" means the Exclusive License Agreement, dated January 27, 2016, by and between Avro and UHN (and as further amended or restated from time to time).

1.1.25 "**Improvements**" means any and all discoveries, derivatives, adaptations, changes, inventions, enhancements and modifications (whether patentable or not) of the Fabry Patents or Fabry Know-How that are created, conceived, developed or reduced to practice either (a) prior to the Effective Date or during the Option Term, by (i) the Principal Investigator (ii) any employees or agents of UHN under the direction or supervision of the Principal Investigator or (iii) the UHN CRO, where same are owned or controlled by UHN and relevant to the Field of Use, or (b) arising from the UHN Planned Trial; but, in each case ((a)-(b)), are not (i) Improved Therapies or (ii) in connection with or in performance of an SRA.

1.1.26 "**Improved Therapies**" means any and all discoveries, derivatives, adaptations, changes, inventions, enhancements or modifications (whether patentable or not) of the Fabry Patents or Fabry Know-How that are created, conceived, developed or reduced to practice prior to the Effective Date or during the Option Term by the Principal Investigator (or any employees or agents of UHN under the direction or supervision of the Principal Investigator) and relevant to the Field of Use, where the technology advancement relates to a new product or a method relating thereto which is distinct from the technology encompassed by the UHN Planned Trial and requires the submission of a new IND or foreign equivalent thereof. For clarity, addition of TMPK to the Fabry Vector is NOT considered a new product.

1.1.27 "**Improved Therapies Know-How**" means any and all Know-How that exists within any of the Improved Therapies.

1.1.28 "**Improved Therapies Patents**" means any and all Patent Rights that claim or cover any of the Improved Therapies.

1.1.29 "**Improvements Know-How**" means any and all Know-How that exists within any of the Improvements.

1.1.30 "**Improvements Patents**" means Patent Rights that claim or cover any of the Improvements.

1.1.31 "**IND**" means with respect to a product, an Investigational New Drug Application filed with the FDA with respect to such product pursuant to 21 C.F.R. § 312 before the commencement of human clinical trials involving such product.

1.1.32 "**Know-How**" means any and all commercial, technical, regulatory, scientific and other know-how, information, knowledge, technology, methods, processes, practices, standard operating procedures, formulae, instructions, skills, techniques, procedures, assay protocols, experiences, ideas, technical assistance, designs, drawings, assembly procedures, specifications, data and results (including biological, chemical, pharmacological, toxicological, pharmaceutical, physical and analytical, pre-clinical, clinical, safety, regulatory, manufacturing and quality control data and know-how, including study designs and protocols), in all cases now known or hereafter developed, whether or not confidential or proprietary, in written, electronic or any other form. Know-How shall exclude Patent Rights (including rights in the Fabry Patents, Improved Therapies Patents, and Improvement Patents).

1.1.33 "**License**" shall have the meaning provided in Section 2.1.

1.1.34 "**Licensed Patents**" means: (a) any and all Fabry Patents, (b) any and all Optioned Improvement Patents, and (b) any and all Patent Rights within the Licensed SRA IP.

1.1.35 "**Licensed Product**" means any product in the Field of Use that (a) the manufacture, use or sale of which, but for the licenses granted herein, would infringe a Valid Claim in the Licensed Patents, or (b) incorporates, uses, or practices the Exclusively Licensed Know-How or Non-Exclusively Licensed Know-How. For greater certainty and clarity, a product in the Field of Use that (i) incorporates, uses or practices any preclinical data or clinical data within the Exclusively Licensed Know-How or Non-Exclusively Licensed Know-How, or (ii) [***] shall be considered a Licensed Product.

1.1.36 "**Licensed SRA IP**" means any and all SRA IP for which the Parties have agreed to incorporate such SRA IP into this Agreement per Section 3.1 (as such IP is further listed in Schedule "D" (as may be amended from time to time)).

1.1.37 "**Licensed Technology**" means any and all Licensed Patents, Exclusively Licensed Know-How and Non-Exclusively Licensed Know-How.

1.1.38 "**License Transfer Fee**" shall have the meaning provided in Section 16.4.2.

1.1.39 "**Licensed Trial Related Data**" means any and all information, data, results and reports (i) owned and controlled by UHN, or (ii) for which UHN has been granted rights and/or permission pursuant to a Fabry Trial Team Agreement and (ii) relating to the UHN Planned Trial, including Patient Data, regulatory documents (including Clinical Trial Applications, Q&As, investigator brochures), manufacturing data (including supplier agreements and batch records) and such other relevant data relating to the use of the Licensed Products in the conduct of the UHN Planned Trial.

1.1.40 "**Net Revenues**" means, the Gross Revenue net of any of the following:

(a) normal, customary and actual quantity, trade or cash allowance/discounts, credits or volume discounts, and other price reductions with respect to Licensed Products;

(b) credits, rebates or allowances because of billing errors, damaged, outdated, obsolete, nonconforming, rejected, re-worked or recalled goods or services or returns with respect to Licensed Product(s);

(c) freight, postage, shipping and insurance charges incurred in transporting the Licensed Product(s) to the Third Party or its designee; and

(d) taxes including sales, use, value-added, and other direct taxes, customs, duties, tariffs, surcharges, or other governmental charges (other than income taxes) levied on, absorbed or otherwise imposed on sales of Licensed Product(s);

with (a) - (d) to be as determined from the books and records of Avro and/or its Affiliate(s) and/or permitted Sublicensee(s), maintained in accordance with generally accepted accounting principles.

For the avoidance of doubt, transfers of a Licensed Product between any of Avro, an Affiliate or a Sublicensee for sale by the transferee shall not be considered Net Revenues hereunder. Net Sales shall not include transfers or dispositions for charitable, promotional, preclinical, clinical, regulatory, or governmental purposes.

In the event that a Licensed Product is sold as a Combination Product, Net Revenues, for the purposes of determining royalty payments on the Combination Product, means the gross amount collected for the Combination Product less the deductions set forth in clauses (a)—(d) above, multiplied by a proration factor that is determined as follows:

If all components of the Combination Product were sold separately during the same or immediately preceding Quarterly Period, the proration factor shall be determined by the formula [A / (A+B)], where A is the average gross sales price of all Licensed Product components (as applicable) during such period when sold separately from the other component(s), and B is the average gross sales price of the other component(s) during such period when sold separately from the Licensed Product components (as applicable); or

If all components of the Combination Product were not sold or provided separately during the same or immediately preceding Quarterly Period, the proration factor shall be determined by the Parties in good faith negotiations based on the reasonably estimated commercial value or relative value contributed by each component.

1.1.41 "**Non-Exclusively Licensed Know-How**" means (a) Fabry Non-Exclusive Know-How (b) any and all Improvements Know-How, and (c) any and all Know-How within the Licensed SRA IP.

1.1.42 "**Notice(s)**" shall have the meaning provided in Section 15.1.

1.1.43 "**Option Term**" means the period commencing on the Effective Date and ending on the [***] anniversary thereof, unless extended by the Parties in writing.

1.1.44 "**Optioned Improvements Patents**" means any and all Improvement Patents which the Parties have agreed to incorporate into this Agreement per Section 3.2.1, as further listed in Schedule "E" (or as may be amended from time to time).

1.1.45 "**Patent Rights**" means all rights in, to and under any patent applications or patents, whether domestic or foreign, or any equivalent thereof, including all direct or indirect divisionals, continuations, continuations-in-part, reissues, reexaminations, supplemental protection certificates or extensions thereof, and any patent that issues on any of the foregoing.

1.1.46 "**Patient Data**" means any and all anonymized and de-identified clinical data, information, results and reports arising from the performance of the UHN Planned Trial (including, for clarity, all raw data, cleaned data, final data, data summaries, 'Case Report Forms' or such similar documents for the UHN Planned Trial).

1.1.47 "**Person**" includes any individual, corporation or other incorporated organization, sole proprietorship, partnership, unincorporated association, unincorporated syndicate, unincorporated organization, trust, body corporate and a natural person in his or her capacity as trustee, executor, administrator or other legal representative.

1.1.48 "**Phase 1 Clinical Trial**" means a human clinical trial of a Licensed Product that would satisfy the requirements of 21 C.F.R. 312.21(a) or corresponding foreign regulations.

1.1.49 "**Phase 2 Clinical Trial**" means a human clinical trial of a Licensed Product that would satisfy the requirements of 21 C.F.R. 312.21(b) or corresponding foreign regulations.

1.1.50 "**Phase 3 Clinical Trial**" means a human clinical trial of a Licensed Product that would satisfy the requirements of 21 C.F.R. 312.21(c) or corresponding foreign regulations.

1.1.51 "**Phase 2/3 Clinical Trial**" means a human clinical trial of a Licensed Product that is not a Phase 2 Clinical Trial or a Phase 3 Clinical Trial, but some combination thereof.

1.1.52 "**Pivotal Trial**" means, with respect to any Licensed Product, a clinical trial that at the time of commencement, is intended by Avro to be the basis for Regulatory Approval with respect to clinical trials for such Licensed Product.

1.1.53 "**Principal Investigator**" shall mean Dr. Jeffrey Medin in his appointment and capacity as affiliate scientist. For purposes of clarity, Dr. Medin shall not be considered a Principal Investigator under this Agreement as it pertains to his appointment and scientific research activities at the Medical College of Wisconsin.

1.1.54 "**Quarterly Period**" means each successive three (3) calendar month period during the Term ending March 31, June 30, September 30 and December 31. The first and last Quarterly Periods may be less than three (3) calendar months and will commence on the Effective Date of this Agreement and terminate on the date this Agreement expires or is earlier terminated, respectively.

1.1.55 "**Receiving Party**" shall have the meaning provided in Section 1.1.10.

1.1.56 "**Regulatory Approval**" means those clearances or approvals of a Regulatory Authority, with respect to any jurisdiction, that are legally required for the marketing or sale of Licensed Products in such jurisdiction.

1.1.57 "**Regulatory Authority**" means any applicable government regulatory authority involved in granting clearances or approvals for the manufacturing or marketing of a Licensed Product, including, in the United States, the FDA, and in Canada, Health Canada.

1.1.58 "**Regulatory Exclusivity**" means any exclusive marketing rights or data exclusivity rights conferred by any regulatory authority with respect to a Licensed Product other than patents, including, without limitation, rights conferred in the United States under the Hatch-Waxman Act or the FDA Modernization Act of 1997 (including pediatric exclusivity), orphan drug exclusivity, rights conferred in Canada under the Patented Medicines (Notice of Compliance) Regulation, the data protection provisions contained in the Food and Drug Regulations (Canada) or rights similar thereto outside the United States or Canada.

1.1.59 "**Regulatory Filing**" means any documentation comprising or relating to or supporting any filing or application with any Regulatory Authority with respect to the UHN Planned Trial, including any documents submitted to any Regulatory Authority and all supporting data, including CTAs and INDs, and all correspondence with any Regulatory Authority with respect to the UHN Planned Trial (including minutes of any meetings, telephone conferences or discussions with any Regulatory Authority).

1.1.60 "**Representatives**" shall have the meaning provided in Section 9.1.

1.1.61 "**Reviewed Sample Processing Data**" means Sample Processing Data which UHN and/or UHN CRO have had in their possession for [***], irrespective of whether UHN Principal Investigator has reviewed such data. For greater certainty, the intent is that all Sample Processing Data is being sent by the Fabry Trial Team Institutions to UHN and UHN Principal Investigator concurrently. For greater certainty, investigator suspected adverse events are not separately identified within the Reviewed Sample Processing Data, but are reviewed in accordance with the Clinical Trial Protocol and reported to Avro in accordance with obligations as outlined in Sections 2.4.4 to 2.4.6.

1.1.62 "**Royalties**" shall have the meaning provided in Section 4.5.

1.1.63 "**Royalty Term**" means, on a Licensed Product-by-Licensed Product basis, the period commencing on the First Commercial Sale of the Licensed Product and continuing on a country-by-country basis as to each Licensed Product until the

later of (a) the expiration or termination of the last to expire Valid Claim within the Licensed Technology that covers such Licensed Product in such country, or (b) expiration of Regulatory Exclusivity for such Licensed Product in such country, or (c) ten (10) years from the date of First Commercial Sale of such Licensed Product in such country.

1.1.64 "**Sample Processing Data**" means all Patient Data generated from testing patient samples by or on behalf of UHN in connection with the UHN Planned Trial and pursuant to the Clinical Trial Protocol.

1.1.65 "**Series A Financing**" means Avro's Series A financing dated as of July 21, 2016.

1.1.66 "**Series B Financing**" shall be Avro's next round of financing after the Series A Financing.

1.1.67 "**Sponsored Research Agreement**" or "**SRA**" means an agreement between UHN and Avro, by which Avro provides financial support to conduct specific and defined research at UHN that relates to the Field of Use, and the Parties agree is intended to fall under this Agreement. Sponsored Research Agreements will include the research activities to be conducted, a budget for the conduct of the research activities, the UHN investigator under whose direction or supervision the research is to be conducted ("**SRA Investigator**"), and appropriate UHN overhead charges per UHN policies and practices (which may be subject to a reduced overhead rate for UHN "spin-out" companies per UHN policy and practice).

1.1.68 "**SRA Intellectual Property**" or "**SRA IP**" means any and all inventions, improvements, discoveries, and Know-How that are created, conceived, developed or reduced to practice in connection with or in performance of an SRA by the SRA Investigator or one or more employees or agents of UHN under the direction or supervision of the SRA Investigator, and any Patent Rights, copyrights or other intellectual property rights related thereto.

1.1.69 "**Sublicensee(s)**" means any non-Affiliate sublicensee of the rights granted by Avro pursuant to Section 2.3.

1.1.70 "**Sublicensing Revenue**" means, all consideration received by Avro or its Affiliate(s) from Sublicensees in consideration for sublicensing of Licensed Technology to such Sublicensees by Avro or its Affiliate(s), but excluding (a) amounts for research, development, or commercialization activities with respect to the Licensed Products or Licensed Technology (including, without limitation, payment for FTEs), (b) any loans, equity or debt investments in Avro or its Affiliates, (c) payments by Sublicensees for payment or reimbursement of patent filing, prosecution, defense, enforcement and maintenance and other related expenses, and (d) monies received as flow through royalty payments pursuant to Section 4.5. Notwithstanding the foregoing, exclusions under any of (a) and (b) are only excluded to the extent such remuneration is a bona fide payment in respect of such matters, and is not being made in order to reallocate what is otherwise intended to be upfront payments, milestones and royalties. For clarity, a License Transfer Fee shall not be deemed to be Sublicensing Revenue.

1.1.71 "**Sublicensing Fee**" shall have the meaning provided in Section 4.6.

1.1.72 "**Term**" shall have the meaning provided in Section 11.1.

1.1.73 "**Territory**" means the world.

1.1.74 "**Third Party**" means a Person other than a Party or its Affiliates.

1.1.75 "**TMPK**" [***].

1.1.76 "**UHN CRO**" means a contract research organization acting on behalf of UHN for purposes of providing management services for the UHN Planned Trial. As of the Effective Date, the UHN CRO is Ozmosis Research Inc. ("Ozmosis").

1.1.77 "**UHN Indemnitees**" shall have the meaning provided in Section 12.1.

1.1.78 "**UHN Planned Trial**" is the Phase 1 Clinical Trial entitled Clinical Pilot Study of Autologous Stem Cell Transplantation of CD34+ Cells Engineered to Express Alpha-Galactosidase A in Patients with Fabry Disease and is conducted under the direction or supervision of the Principal Investigator. For purposes of this Agreement, the UHN Planned Trial is currently described in the Clinical Trial Protocol as a clinical trial that will enroll and dose six (6) patients and will consist of four phases, the screening phase, the pre-treatment phase, the treatment phase and a five year follow-up phase.

1.1.79 "**Valid Claim**" means, on a country-by-country basis, (a) a claim of an issued and unexpired patent which has not been revoked or held unenforceable or invalid by a decision of a court or other governmental agency of competent jurisdiction, unappealable or unappealed within the time allowed for appeal, and which has not been admitted to be invalid or unenforceable through reissue or disclaimer or otherwise, or (b) a claim of a pending patent application that was filed and has been prosecuted in good faith and has not been (i) cancelled, withdrawn, abandoned or finally disallowed without the possibility of appeal or refiling of such application, or (ii) (A) pending for more than [***] since such claim was first presented or (B) is the result of amending another claim pending for more than [***] (either in the same application or in another application in the same jurisdiction) so as to add or delete an obvious limitation, so as to make a trivial or nonsubstantive change, or so as to change a matter of form; except that any claim that becomes invalid pursuant to (ii)(A), or (ii)(B), and later issues, shall be considered a Valid Claim from the date of issuance.

1.1.80 **Other Defined Terms**. All other defined terms in this Agreement shall have the meanings as otherwise specifically set out within the body of this Agreement.

1.2 **Sections and Headings**. The division of this Agreement into Articles, Sections and Subsections and the insertion of headings are for reference purposes only and shall not affect the interpretation of this Agreement. Unless otherwise indicated, any reference to a particular Article, Section, clause or Schedule refers to the specified Article, Section or clause of, or Schedule to, this Agreement.

1.3 **Number**, **Gender and Persons**. In this Agreement, words importing the singular number shall include the plural and vice versa, words importing gender shall include all genders and words importing persons shall include individuals, corporations, partnerships, associations, trusts, unincorporated organizations, governmental bodies and other legal or business entities.

1.4 **Currency**. All monetary amounts in this Agreement are in Canadian funds.

1.5 **Schedules**. The following Schedules are annexed to and form part of this Agreement:

Schedule “A” and Schedule “B” Fabry Know-How (as may be updated from time to time as dictated herein)

Schedule “C” - Fabry Patents (as may be updated from time to time)

Schedule “D” - Licensed SRA IP (as may be updated from time to time) Schedule “E”—Optioned Improvement Patents (as may be updated from time to time).

1.6 **Accounting Principles**. Any reference in this Agreement to “generally accepted accounting principles” refers to generally accepted accounting principles as approved from time to time by the Canadian Institute of Chartered Accountants or any successor institute, U.S. generally accepted accounting principles, or International Financial Reporting Standards.

1.7 **Best of Knowledge**. “To the best of the knowledge” or “to the knowledge”, unless otherwise qualified hereunder means a statement of the declaring Party’s knowledge of the actual facts or circumstances to which such phrase relates without having made any inquiries or investigations in connection with such facts and/or circumstances.

ARTICLE 2 - GRANT OF RIGHTS

2.1 **License Grant**. UHN hereby grants to Avro and its Affiliates during the Term (collectively, the “**License**”).

2.1.1 an exclusive (subject to Section 2.2), royalty-bearing, transferable (as set forth in Section 16.4) license, with the further right to grant sublicenses subject to Section 2.3, under the Exclusively Licensed Know-How and Licensed Patents, to research, have researched, develop, have developed, make, have made, use, have used, sell, have sold, offer for sale, have offered for sale, import, have imported, export and have exported Licensed Products in the Field of Use for the Territory.

2.1.2 a non-exclusive, royalty-bearing, transferable (as set forth in Section 16.4) license, with the further right to grant sublicenses subject to Section 2.3, under the Non-Exclusively Licensed Know-How, to research, have researched, develop, have developed, make, have made, use, have used, sell, have sold, offer for sale, have offered for sale, import, have imported, export and have exported Licensed Products in the Field of Use for the Territory.

2.2 **UHN Retention of Rights**.

2.2.1 The License granted to Avro under Section 2.1 is subject to UHN’s retention of its rights to use the Licensed Technology without charge, for (a) the conduct of the

UHN Planned Trial, (b) research conducted for noncommercial or academic purposes, (c) clinical trials of an academic or noncommercial nature, and (d) the right to grant non-exclusive licenses to Third Party non-profit academic or research institutes for the same purposes of items (a), (b) and (c), and subject to the terms and conditions outlined in Sections 3.2.1, and 3.2.2, and Articles 9 and 10.

In addition, UHN is responsible for conducting the UHN Planned Trial, and will (itself or with collaborating institutions) enroll and dose at least [***] patients in the UHN Planned Trial with a [***] follow-up phase pursuant to its retained rights and subject to Section 2.4; provided, however, that UHN shall not be deemed to be in breach of the foregoing obligation in the event that UHN discontinues the UHN Planned Trial due to events outside of the reasonable control of UHN (i.e., actions taken by Regulatory Authorities, due to a material safety issue of a Licensed Product, or due to Avro's uncured breach of its payment obligations in the Letter Agreement). In the event that UHN (i) does not enroll or dose any of the [***] patients in the UHN Planned Trial, (ii) does not complete the [***] follow-up phase for any such patients in the UHN Planned Trial, or (iii) otherwise discontinues or winds down the UHN Planned Trial for any reason, then UHN will promptly (and in any event within [***]) refund to Avro all monies paid in advance by Avro to UHN pursuant to the Letter Agreement for services or activities not performed (if any), other than any reasonable, non-cancellable Trial Costs (as defined in the Letter Agreement) incurred by UHN for the UHN Planned Trial.

2.2.2 If Avro elects to proceed on its own with a Phase 1 Clinical Trial with respect to the first Licensed Product ("**Avro Clinical Trial**"), Avro will consult with the Dr. Jeffrey Medin, and at his request, Dr. Medin will be included as an author on resulting publication(s), and subject to restrictions on publications as outlined in Section 2.2.4. For clarity, the obligation in the preceding sentence applies only to the first Phase 1 Clinical Study of the first Licensed Product conducted by Avro and is limited to Dr. Jeffrey Medin.

2.2.3 UHN agrees to keep Avro informed of any clinical research or development conducted (or contemplated to be conducted) by or on behalf of UHN with respect to the UHN Planned Trial involving the Licensed Technology as soon as reasonably practicable to ensure that UHN does not diminish or conflict with any licenses, options or other rights in Licensed Technology or Licensed Products granted to Avro, and to enable Avro and its Affiliates and Sublicensees to comply with their regulatory obligations. For certainty and clarity, clinical research or development conducted (or contemplated to be conducted) by or on behalf of UHN includes clinical research or development conducted pursuant to the rights retained under Section 2.2.1.

2.2.4 The UHN Principal Investigator, on behalf of UHN, retains the right to publish the final results of the UHN Planned Trial in a peer-reviewed journal or publication prior to any publication of the final results of the Avro Clinical Trial in a peer-review journal or publication; provided that such right of publication priority in favor of the UHN Principal Investigator, on behalf of UHN, shall expire upon the earlier of (a) the termination or discontinuation of the UHN Planned Trial for any reason, or (b) [***] after the last dose for the last patient has been administered for the Avro Clinical Trial.

2.2.5 Avro acknowledges and agrees that (a) its rights to the Licensed Technology further to the License are restricted in accordance with the terms and provisions of this Agreement, and (b) subject to the terms and conditions of Section 3.2 and this Section 2.2, UHN retains all rights to use, develop and commercially exploit the Licensed Technology outside the scope of the License.

2.3 **Sublicenses**. Avro and any of its Affiliates shall have the right to grant sublicense(s) through multiple tiers to the licenses and rights granted to it under this Agreement to any Sublicensee (the "**Sublicense(s)**"**);** provided, however, that:

2.3.1 the Sublicense shall not have any terms which are inconsistent with this Agreement, including for clarity publication rights under Section 2.2.4;

2.3.2 Sublicensee(s) shall be required to make records available to UHN in accordance with the obligations outlined in Sections 4.11 and 4.12; and

2.3.3 unless otherwise indemnified by Avro or its Affiliate directly, the Sublicense shall provide that the Sublicensee will directly indemnify UHN on terms at least as favourable as those in Article 12 unless approved otherwise in writing by UHN.

Upon termination of this Agreement for any reason, provided that a Sublicensee is not in material breach of its Sublicense, UHN shall grant to such Sublicensee license rights and terms equivalent to the sublicense rights and terms which Avro previously granted to such Sublicensee.

2.4 **Know-How Transfer and Right of Reference**.

2.4.1 UHN shall, at Avro's sole cost and expense, provide Avro with access to all of the Exclusively Licensed Know-How and Non-Exclusively Licensed Know-How as same arises, and as soon as reasonably practicable after the Effective Date with respect to any then-existing Exclusively Licensed Know-How and Non-Exclusively Licensed Know-How in UHN's and/or UHN's CRO's possession or control, in conjunction with the exercise by the Avro of its rights under the License. The Parties will (a) work collaboratively together to facilitate the process for transferring the Exclusively Licensed Know-How and Non-Exclusively Licensed Know-How and (b) use reasonable best efforts to meet the proposed timelines as set out in Schedule "A" and any amendment to the timelines shall be agreed to as between the Parties, each acting reasonably. The Parties will use reasonable best efforts to transfer all other Exclusively Licensed Know-How and Non-Exclusively Licensed Know-How in accordance with this Section 2.4 or as otherwise reasonably agreed by the Parties. Details regarding transfer of Exclusively Licensed Know-How and Non-Exclusively Licensed Know-How in the possession of the Fabry Trial Team shall be governed by Fabry Trial Team Agreements. For the avoidance of doubt, the licenses with respect to the Exclusively Licensed Know-How and Non-Exclusively Licensed Know-How in the possession of the Fabry Trial Team shall be governed by this Agreement (including Section 2.1).

2.4.2 Subject to UHN's retention of rights further to Section 2.2, UHN hereby grants Avro an exclusive right of reference in the Field of Use to any CTAs and other Regulatory Filings owned or controlled by UHN as of the Effective Date or during

the Term for Licensed Products to enable Avro to obtain Regulatory Approval of Licensed Products in the Territory or otherwise for any purpose in conjunction with the exercise by Avro of the License and its rights under this Agreement. Upon Avro's written request, UHN shall deliver to any Regulatory Authority an original letter authorizing Avro to reference and incorporate any such CTAs or other Regulatory Filings owned or controlled by UHN; provided that, such letter shall be reasonably acceptable to Avro and shall be signed by the appropriate representative of UHN so that it is received by the applicable Regulatory Authority as soon as reasonably practicable (but in no event later than [***] after Avro's written request). UHN shall provide Avro with a copy of such letter as transmitted to such Regulatory Authority no later than [***] after such transmission and provide to Avro proof of delivery of such letter. In the case of Indiana University acting as a contract manufacturer on behalf of UHN, to the extent UHN has such rights as set forth in its agreements with Indiana University, UHN hereby grants to Avro an exclusive right of reference to the DMF of Indiana University for Licensed Products to enable Avro to obtain Regulatory Approval of Licensed Products in the Territory or otherwise for any purpose in conjunction with the exercise by Avro of the License and its rights under this Agreement (taking into account that the DMF may contain confidential information of Indiana University that may not be shared with Avro).

2.4.3 UHN shall, at Avro's sole cost and expense, provide Avro with access to copies of all Regulatory Filings created for, submitted to or received from an applicable Regulatory Authority relating to the Licensed Products and all data contained therein, and any amendments, supplements, correspondence or further submissions (including adverse events and product complaints) to any of the foregoing, as well as the contents of any minutes from meetings (whether in person or by audio conference or videoconference) with Regulatory Authorities, in each case relating to the Licensed Products.

2.4.4 For each patient in the UHN Planned Trial who goes off-study after having been subject to treatment, UHN shall provide to Avro, at Avro's sole cost and expense, all Patient Data relating to said patient as soon as reasonably practicable after such information becomes available to UHN and/or UHN CRO after the date upon which such patient goes off-study, including all related Patient Data and the reason such patient went off-study. Details regarding transfer of off study Patient Data from the Fabry Trial Team to UHN and/or UHN CRO shall be governed by the Fabry Trial Team Agreements.

2.4.5 For each patient in the UHN Planned Trial, UHN and/or UHN CRO shall provide to Avro, at Avro's sole cost and expense, all Patient Data relating to said patient as soon as reasonably practicable upon such Patient Data becoming available to UHN and/or UHN CRO. Similarly, with respect to Sample Processing Data, provision of Reviewed Sample Processing Data by UHN and/or UHN CRO to Avro within [***] of data becoming Reviewed Sample Processing Data shall be considered as soon as reasonably practicable. In the event that any adverse event is determined to be a serious and unexpected adverse reaction event relating to the treatment ("SUSAR") in accordance with the process as outlined in the Clinical Trial Protocol, UHN shall provide such information to Avro within [***] of the decision to report such SUSAR to the relevant regulatory authority (or such other time period as the Parties may agree). Promptly following the disclosure of

a SUSAR to Avro, at Avro's request, the UNH CRO shall provide all Patient Data with respect to such SUSAR and other information that is reasonably requested by Avro to Avro or its designee(s), in each case for patient care purposes or to enable Avro or its Affiliates or Sublicensees to comply with any applicable laws, rules or regulations, and the UHN CRO shall discuss and answer all reasonable questions from Avro or its designee(s) relating thereto. Details regarding transfer of Clinical Trial Data, Sample Processing Data, and SUSAR data from the Fabry Trial Team to UHN shall be governed by the Fabry Trial Team Agreements. Similarly, to the extent Avro or an Affiliate or Sublicensee is conducting a clinical trial (including a Phase I Clinical Trial or a Pivotal Trial) relating to Fabry disease with the same vector in accordance with the Clinical Trial Protocol while the UHN Planned Trial is ongoing, and in the event that any adverse event is determined to be a SUSAR in accordance with the process as outlined in the Clinical Trial Protocol, Avro shall provide such information to UHN within [***] of the decision to report such SUSAR to the relevant regulatory authority (or such other time period as the Parties may agree). Promptly following the disclosure of a SUSAR to UHN, at UHN's request, Avro shall provide all patient data with respect to such SUSAR and other information that is reasonably requested by UHN to UHN, in each case for patient care purposes or to enable UHN to comply with any applicable laws, rules or regulations, and Avro shall discuss and answer all reasonable questions from UHN relating thereto.

2.4.6 At Avro's request, UHN and/or UHN CRO and Avro shall work jointly with an external contractor, at Avro's sole cost and expense, to prepare monthly reports to provide to Avro for Clinical Trial Data ("**Monthly Clinical Trial Report**"). UHN and/or UHN CRO shall provide such Monthly Clinical Trial Report to Avro within [***] after the end of each calendar month. The Parties shall work together to ensure such Monthly Clinical Trial Report is in a form acceptable to Avro. Subject to the approval of the requisite Research Ethics Board, UHN shall ensure that all informed consent form(s) under which any Patient Data will be obtained permit (a) UHN to provide such Patient Data to Avro and its Affiliates and Sublicensees, and (b) Avro and its Affiliates and Sublicensees to use such Patient Data in accordance with the terms of this Agreement.

2.4.7 In accordance with applicable laws and in a manner consistent with good clinical practice, UHN shall maintain, and shall cause its investigators and collaborating institutions (including the Fabry Trial Team) to maintain, complete and accurate records relating to the CTA, Regulatory Filings and the Patient Data to be provided to Avro. UHN, its investigators and collaborating institutions (including the Fabry Trial Team), as applicable, shall retain such records relating to CTA and Regulatory Filings for a period of at least [***] after the date of delivery of such information or reports to Avro (the "**Data Retention Period**"). During the Data Retention Period, Avro shall have the right, at its sole expense, during normal business hours, to provide a qualified person ("**Auditor**") to inspect such records of UHN, and its investigators and collaborating institutions (including the Fabry Trial Team), as applicable, for the purposes of verifying the accuracy of any information or reports delivered to Avro hereunder and UHN's compliance with the terms hereof; provided that, Avro shall give UHN and/or its investigators and collaborating institutions (including the Fabry Trial Team), as applicable, reasonable prior written notice (which shall be at least [***]) prior to Auditor conducting any such audit. UHN may require Avro to enter into an additional,

customary nondisclosure agreement(s) prior to undertaking any such inspection as required by law or UHN policy or collaborating institution policy (as applicable). Any and all books, records, reports and other documents of UHN that are inspected by Auditor pursuant to this Section 2.4.7 shall be deemed UHN Confidential Information. The Parties will comply with all applicable federal, state and provincial privacy legislation including (as applicable) the Personal Information Protection and Electronic Documents Act, S.C. 2000, c. 5 ("**PIPEDA**") and the Personal Health Information Protection Act, 2004, S.O. 2004, c. 3 ("**PHIPA**"). In the conduct of such audits, Auditor may be given access to personal information in order to validate case report forms through source documentation. Auditor shall not copy documents containing personal information or take notes of personal information. In the event that personal information about a UHN Planned Trial (or other clinical trial) subject is transferred to Avro and its employees or agents, Avro and its employees and agents shall only use the information for purposes authorized in writing by UHN or required by law; and shall appropriately protect the information against loss, theft, unauthorized access, copying, or modification; not publish the information in a form that could reasonably permit identification of the individual; not contact or attempt to contact the individual; and notify UHN and/or others as may be directed, immediately in writing upon becoming aware of any breach of this Section 2.4. Avro shall ensure that their employees and agents comply with the terms and conditions of this Section 2.4.

The report from the audit shall be deemed Avro Confidential Information. Avro may exercise the rights under this Section 2.4.7 only once during any Calendar Year. During the Data Retention Period, UHN shall, to the extent practicable, cause its investigators and collaborating institutions to comply with the terms of this Section 2.4.7. If such audit reveals that UHN or its investigators or collaborating institutions, as applicable, failed to provide information or data that should have been provided to Avro hereunder, or that any element of the information or reports delivered to Avro hereunder were incomplete or inaccurate, UHN promptly shall provide such missing information or data to Avro and/or complete and correct such information or reports and provide corrected information or reports to Avro.

2.4.8 UHN and Avro will use reasonable best efforts to execute the Fabry Trial Team Agreements in a form mutually agreed by UHN and Avro within [***] after the Effective Date. Each Party acknowledges that delays by one or more Fabry Trial Team Institution(s) is outside of the control of each of the Parties. The Parties further acknowledge that after using reasonable best efforts to present a draft Fabry Trial Team Agreement to the Fabry Trial Team Institution(s), the Parties can only act reasonably in considering any revisions requested by the Fabry Trial Team Institution(s).

2.4.9 UHN will ensure clinical trial site agreements with any investigator or collaborating institution (including the Fabry Trial Team) relating to the UHN Planned Trial are consistent with UHN's obligations, and, subject to the terms of any executed Fabry Trial Team Agreement(s), will not diminish or conflict with any licenses, options or other rights in Licensed Technology or Licensed Products granted to Avro, under this Article 2, including the License granted under Section 2.1 and the obligations outlined in this Section 2.4.

2.4.10 Notwithstanding anything herein to the contrary, all costs or expenses to be incurred by Avro, and the design and content of the related deliverables to be delivered to Avro, pursuant to this Section 2.4 must be pre-approved by Avro in writing, and will be paid pursuant to Section 4.4. For clarity, the costs or expenses to be incurred by Avro pursuant to this Section 2.4 shall be limited to reasonable, documented costs and expenses incurred by third parties only.

ARTICLE 3 - SRA IP & FURTHER OPTIONS

3.1 **SRA & Related Intellectual Property**. The Parties contemplate the execution of one or more Sponsored Research Agreement(s). Each SRA will include and incorporate appropriate provisions in respect of Avro rights and entitlements to SRA IP, including any agreement of the Parties to incorporate any such SRA IP (in whole or in part) into this Agreement as Licensed SRA IP. In such an event, the Parties shall execute all appropriate documentation to record such inclusion as Licensed SRA IP and shall further update Schedule "D" as required.

3.2 **Option Related to Improvements and Improved Therapies**

3.2.1 **Improvements Option**. During the Option Term, and subject to any Third Party rights of (i) University of Wisconsin that exist as of the Effective Date or that may arise during the Option Term, or (ii) that may arise as a result of UHN's exercise of its retained rights pursuant to Section 2.2.1, UHN hereby grants to Avro and its Affiliates an exclusive option to obtain an exclusive license under any or all of UHN's interests in the Improvement Patents to research, have researched, develop, have developed, make, have made, use, have used, sell, have sold, offer for sale, have offered for sale, import, have imported, export and have exported Licensed Products in the Field of Use for the Territory (the "**Option**"). From time to time during the Option Term, or upon Avro's written request during the Option Term, UHN shall (a) promptly inform Avro of the preparation or filing of any Improvements Patents, (b) provide to Avro a summary of all Improvements created, conceived, developed or reduced to practice during the Option Term that are incorporated into said Improvements Patents, and (c) afford Avro a reasonable opportunity during business hours to speak with UHN personnel (including the Principal Investigator) regarding the Improvements Patents in order to permit Avro to determine whether to exercise the Option. Within [***] of Avro's receipt of information from UHN regarding an Improvement Patent(s), Avro may (in its sole discretion) provide Notice to UHN of its intention to exercise the Option with respect to such Improvements Patent(s), such that such Improvements Patents become Optioned Improvements Patents. On UHN's receipt of such Notice, the Parties shall promptly (and in any event prior to the expiration of the Option Term) execute an amendment to this Agreement to include such Improvements Patents as Optioned Improvements Patents on the existing terms and conditions set forth in this Agreement (which includes, without limitation, the reimbursement of UHN patent costs and expenses). For clarity, Avro will have the right to exercise the Option from time to time during the Option Term as and when notified of such Improvements Patents in accordance with the terms of this Section 3.2.1. If UHN does not receive a Notice during the time period specified above from Avro of its intent to exercise the Option with respect to such disclosed Improvement Patents, the option with respect to such disclosed Improvement Patents shall lapse, and the license to any Improvements Know-How associated with such Improvement Patents, shall terminate and UHN will be free to dispose of the disclosed Improvement Patents in its sole and absolute discretion without any further notice or accounting to Avro.

3.2.2 **Improved Therapies Option.** During the Option Term, UHN hereby also grants to Avro and its Affiliates an exclusive option to negotiate any or all of the following licenses and rights (the "**Improved Therapies Option**"):

(a) subject to any Third Party rights of (i) University of Wisconsin that exist as of the Effective Date or that may arise during the Option Term or (ii) that may arise as a result of UHN's exercise of its retained rights pursuant to Section 2.2.1, an exclusive license under UHN's interest in any or all of the Improved Therapies Patents to research, have researched, develop, have developed, make, have made, use, have used, sell, have sold, offer for sale, have offered for sale, import, have imported, export and have exported products or services in the Field of Use for the Territory, to the extent such rights are available in law;

(b) subject to any Third Party rights (i) of University of Wisconsin that exist as of the Effective Date or that may arise during the Option Term or (ii) that may otherwise arise as a result of UHN's exercise of its retained rights pursuant to Section 2.2, a non-exclusive license under UHN's interest in any or all of the Improved Therapies Know-How to research, have researched, develop, have developed, make, have made, use, have used, sell, have sold, offer for sale, have offered for sale, import, have imported, export and have exported products or services in the Field of Use for the Territory, to the extent such rights are available in law;

From time to time during the Option Term, or upon Avro's written request during the Option Term, UHN shall (A) promptly inform Avro of the preparation or filing of any Improved Therapies Patents, (B) provide to Avro a summary of all Improvements created, conceived, developed or reduced to practice prior to the Effective Date or during the Option Term that are incorporated into said Improved Therapies Patents and (C) afford Avro a reasonable opportunity during business hours to speak with UHN personnel (including the Principal Investigator) regarding the Improved Therapies Patents and Improved Therapies Know-How in order to permit Avro to determine whether to exercise the Improved Therapies Option. Within [***] of receipt of information from UHN informing Avro of said Improved Therapies Patent(s), Avro may (in its sole discretion) provide Notice to UHN of its intention to exercise any or all of Improved Therapies Option regarding said Improved Therapies Patent(s). On UHN's receipt of such Notice, the Parties shall negotiate in good faith to enter into a license agreement on terms and conditions to be agreed to by the Parties, including financial terms at least as favourable to UHN as those of this Agreement (which includes, without limitation, the reimbursement of UHN patent costs and expenses). For clarity, Avro will have the right to exercise the Improved Therapies Option within [***] of such disclosure to Avro when any Improved Therapies are disclosed by UHN to Avro in accordance with the terms herein.

3.2.3 **Residual Rights**. In the event that:

(a) UHN does not receive the aforementioned Notice from Avro in respect of the Improved Therapies Option during the Option Term, or

(b) the Parties do not execute a license with respect to the Improved Therapies Option, or

(c) the Parties do enter into a license with respect to the Improved Therapies Option, but such license is terminated and the rights to exploit the Improved Therapies Patents is subsequently returned to UHN,

UHN will then have the right to license the Improved Therapies Patents for the purpose of research, development and commercialization of any products or services thereunder in the Field of Use in its sole discretion and without any further notice or accounting to Avro.

ARTICLE 4 - CONSIDERATION

4.1 **Payment**. Payments of funds to UHN shall be made to "University Health Network" and sent to the following address:

University Health Network
Technology Development & Commercialization
College Street - Suite 150
Heritage Building - MaRS Centre
Toronto, Ontario, Canada, M5G 1L7
Attention: tdc@uhnresearch.ca

4.2 **License Maintenance/Upfront Fee**. Upon execution of this Agreement, and on each anniversary of the Effective Date during the Term, Avro shall pay UHN (a) a non-refundable and non-creditable (towards any other consideration owing pursuant to this Agreement with the exception of Section 4.6) license fee payment of [***] until the first sale of a Licensed Product in [***], and (b) a non-refundable, non-creditable, one-time upfront fee of seventy five thousand Canadian dollars (C$75,000) upon the execution of this Agreement. UHN will maintain [***] of these funds in a separate UHN account, to be maintained in support of UHN's obligations pursuant to the accompanying letter agreement to be executed concurrently with this Agreement (the "**Letter Agreement**").

4.3 **Reimbursement of Past Patent Costs**. Avro shall reimburse UHN for all previously unreimbursed patent expenses incurred prior to and up to the Effective Date in respect of the filing, maintenance and prosecution of the Fabry Patents (the "**Patent Expenses**"). For information purposes only, such costs are estimated to be [***]. All past patent costs are due and payable upon execution of this Agreement.

4.4 **Reimbursement of Addition Costs and Expenses**. For any third party out-of-pocket costs and expenses that are pre-approved by Avro in writing in accordance with Section 2.4.10, within [***] after [***], the incurring party will invoice Avro for any amounts owed by Avro under Section 2.4 that are not otherwise accounted for in this Section 4. Avro will pay any undisputed amounts within [***] of receipt of the invoice, and any disputed amounts owed by a Party will be paid within [***] of resolution of the dispute.

4.5 Royalties.

4.5.1 **[***]**. During the Royalty Term, Avro shall, on a country-by-country and Licensed Product-by-Licensed Product basis, pay to UHN a running royalty in the amount of (a) (i) **[***] percent ([***]%)** of Net Revenues for annual sales of such Licensed Product up to [***], (ii) **[***] percent ([***]%)** of Net Revenues for annual sales of such Licensed Product between [***] up to [***], (iii) **[***] percent ([***]%)** of Net Revenues for annual sales of such Licensed Product between [***] up to [***], and (iv) **[***] percent ([***]%)** of Net Revenues for annual sales of such Licensed Product in excess of [***], during the period in which (A) such sale would but for the licenses granted herein infringe any Valid Claims contained in the Licensed Technology in such country, or (B) [***].

4.5.2 **[***]**. During the Royalty Term, Avro shall, on a country-by-country basis and Licensed Product-by-Licensed Product basis, in respect of countries in which [***], pay UHN a running royalty in the amount of **[***] percent ([***]%)** of Net Revenues for such Licensed Product sold in [***].

Amounts paid pursuant to this Section 4.5 shall be referred to as "**Royalties**".

Upon expiration of the Royalty Term with respect to a Licensed Product in a country, the license grant shall become fully paid-up, royalty-free, perpetual and irrevocable for such Licensed Product in such country.

To the extent that Avro or any of its Affiliates or Sublicenses obtains licenses to third party patent rights or other intellectual property in order to practice the Patent Rights in Licensed Technology or to research, develop, manufacture or commercialize any Licensed Products and the aggregate royalty burden payable on a Licensed Product is greater than [***] percent ([***]%) (i.e., [***] percent ([***]%) of the total Net Revenues of Licensed Product payable to UHN and any other Third Party), Avro and its Affiliates or Sublicensees may deduct from any royalty due to UHN hereunder [***] percent ([***]%) of the then applicable aggregate royalty burden over said [***] percent ([***]%) (the "**Deductible Third Party Royalties**") up to maximum reduction of [***] percent ([***]%) of the running Royalties owed UHN in any Quarterly Period hereunder (the "**Maximum Royalty Reduction**"), with any Deductible Third Party Royalties that exceed the Maximum Royalty Reduction in any Quarterly Period carried over into immediately succeeding Quarterly Period(s) until exhausted, however in no event shall the UHN Royalties owed in any such succeeding Quarterly Period(s) be reduced by greater than the Maximum Royalty Reduction.

If the manufacture, use or sale of any Licensed Product or is covered by more than one of patent rights within the Licensed Technology, multiple royalties shall not be due.

4.6 Sublicensing Fee.

In further partial consideration of the License, Avro shall pay to UHN **[***] percent ([***]%)** of all Sublicensing Revenue (the "**Sublicensing Fee**"). Any amounts paid to UHN further to Section 4.2 (License Maintenance/Upfront Fee) and Article 5 (Milestones) shall be creditable by Avro against amounts due to UHN further to this Section 4.6; however, the payments further to Section 4.2 and Article 5 shall not act as a cap on the payments owed further to this Section 4.6.

To the extent that patent rights, other intellectual property rights or other rights or obligations other than Licensed Technology are licensed, sublicensed or granted by Avro in addition to the Licensed Technology for which the Sublicensing Revenue is attributable, that portion of the consideration received by Avro and subject to this Section 4.6 shall be equitably apportioned between the Licensed Technology and those other rights and obligations, and such apportionment shall be reasonable and in accordance with customary standards in the industry. Avro shall promptly deliver to UHN a written report setting forth such apportionment. In the event UHN disagrees with the determination made by Avro, UHN shall so notify Avro within [***] of receipt of Avro's report and the Parties shall meet to discuss and resolve such disagreement in good faith. If the Parties are unable to agree in good faith as to such fair market values within [***] then (a) the matter shall be submitted in accordance with the dispute resolution process set forth in Article 14, and (b) UHN shall not be entitled to terminate this Agreement until a final determination has been made pursuant to Section 14.3.

4.7 **Royalty Payments**. The Royalties described in Section 4.5 shall accrue as of the date of receipt of Gross Revenue (either by Avro, its Affiliate or Sublicensee, as appropriate) and the Sublicensing Fee described in Section 4.6 shall accrue as of the date of receipt of Sublicensing Revenues by Avro, and all amounts owing pursuant to Sections 4.5 and 4.6 shall be paid by Avro within [***] after the end of each Quarterly Period in which said revenue/fee accrues.

4.8 **Interest**. All undisputed monies payable to UHN and not paid when due bear interest at the prime rate of interest quoted by the Bank of Canada, plus [***] percent ([***]%) per annum until the date paid to UHN. UHN will be entitled to that interest in addition to any other rights or remedies available to it in respect of any payment default.

4.9 **Withholdings**. In the event that Avro is required by any law to withhold and/or make payments to tax authorities in respect of any payments payable by Avro to UHN under this Agreement, the liability of Avro under this Agreement shall be to that extent satisfied, and such amounts shall be deemed to have been paid to UHN on their due dates, provided that Avro shall provide UHN with acceptable evidence of such payments.

4.10 **Royalty Report**. After the First Commercial Sale of a Licensed Product, Avro shall prepare a report (the "**Royalty Report**") at the end of each Quarterly Period, setting out the Gross Revenue, the Net Revenue (including an itemized statement of any permitted discounts, refunds and taxes deducted), the Sublicensing Revenue, and the number of Licensed Products sold, along with calculations of any Royalties and Sublicensing Fee that are payable to UHN. Royalty Reports shall be due within [***] of the end of the relevant Quarterly Period. If no payments are due for any Quarterly Period, then the Royalty Report shall so state.

4.11 **Complete Records**. Avro shall keep true and accurate records and books of account (in accordance with generally accepted accounting principles) containing all data reasonably required for the computing and verification of Gross Revenues, Net Revenues, Sublicensing Revenues and Royalties and Sublicensing Fee. Avro shall contractually require all Avro Affiliates and Sublicensees to keep same and provide a copy of same to Avro for purposes of inspection pursuant to Section 4.12. Such records shall be maintained and accessible to UHN for at least [***] from the date of the payment to which such records are relevant.

4.12 **Inspection of Records**. The records specified in this Agreement shall be available for inspection by UHN or their duly appointed auditor, but not more than once per Calendar Year, upon reasonable written notice and during normal business hours at the principal place of business of Avro, for the sole purpose of verifying payments owed under this Agreement. The costs of any such inspection shall be borne by UHN unless the report of an auditor shows that the Royalty Report was understated by more than [***] percent ([***]%) in respect of the period under review, in which case UHN's reasonable out of pocket costs of the examination shall be paid by Avro. Avro may require such auditor to enter into a commercially reasonable confidentiality agreement with Avro prior to being provided with any such records.

4.13 **Discrepancy in Records**. In the event that the records inspection conducted under Section 4.12 reveals any underpayment of royalties due to UHN, Avro will promptly pay UHN the full amount of that underpayment together with interest thereon at the rate of interest referred to in Section 4.8. In the event that the records inspection conducted under Section 4.12 reveals any overpayment of royalties by Avro, the overpaid amount will be credited against future amounts payable to UHN.

4.14 **Confidentiality**. The reports and records provided by Avro and its Affiliates and Sublicensees hereunder further to Sections 4.10, 4.11 and 4.12 shall be regarded as Avro's (or its Affiliates' or Sublicensees', as applicable) Confidential Information and UHN hereby covenants that it shall not use or disclose any information included in such reports for any purpose other than determining whether Avro, its Affiliates and Sublicensees have complied with their obligations under this Agreement. UHN further agrees that, until such time as such information is no longer confidential through no fault of UHN, it shall maintain such reports and any information included therein in strict confidence and treat such information in a manner at least as restrictive as its manner of treating its own Confidential Information of similar nature and in any event not less than with a reasonable degree of care. In addition, any summary of the audit report and analysis, and the Royalty Payments amounts received by UHN (both in total, and particularized on a country-by-country basis) shall be considered Confidential Information of Avro for purposes of this Section 4.14.

4.15 **Philanthropic Commitment**. Avro will donate funds equivalent to **[***] ([***]%)** of the (a) Royalties payable to UHN under Section 4.5 and (b) regulatory milestone payments payable to UHN under Section 5.8 to organizations for the benefit of the Canadian Fabry community; provided, that, in no event shall such donated amounts exceed five hundred thousand Canadian dollars (C$500,000) in any calendar year. UHN shall direct how such funds will be donated, subject to its consultation with Avro. Upon request by UHN, Avro shall provide all documentation and engage in such actions as reasonably requested by UHN to document and/or memorialize and/or verify any such donation.

ARTICLE 5 - MILESTONES

5.1 **Performance Milestones to Maintain License**. Avro, itself or through its Affiliates or Sublicensees, shall be responsible for achieving the following performance milestones in the time periods as noted, for purposes of maintaining the License:

5.1.1 [***]; and

5.1.2 [***].

The Parties acknowledge and agree that the Phase 1 Clinical Trial in Section 5.1.1 above may be conducted by UHN (including the UHN Planned Trial) or another university or academic institution for purposes of satisfying this performance milestone.

5.2 **Extension of Performance Milestone**. The Parties may agree to extend: (a) the timelines for the performance of the Section 5.1 milestones, or (b) the Negotiation Period (as defined below in Section 5.3). Any such agreement to extend such timelines shall be in writing.

5.3 **Failure to Fulfill Performance Milestone(s)**. In the event that Avro is unable to satisfy one or more of the Section 5.1 milestone(s) within the timeline(s) as noted (or within the timeline(s) as extended pursuant to Section 5.2 or Section 5.4) on the following basis: (a) for reasons beyond Avro's reasonable control (including reasons relating to regulatory requirements or events or UHN's failure to [***]), and (b) despite Avro having used, and continuing to use (during any Negotiation Period as outlined herein) commercially reasonable efforts to develop at least one Licensed Product, then UHN and Avro shall negotiate in good faith for up to a period of [***] ("**Negotiation Period**") to reach agreement on revised timelines and/or revised milestones, during which Negotiation Period UHN shall not terminate this Agreement. Absent either of: (i) an extension, or revision to the Section 5.1 milestones (such extension or revision not to be unreasonably withheld, conditioned or delayed), or (ii) Avro otherwise fulfilling the Section 5.1 milestone(s) within the Negotiation Period, UHN may terminate this Agreement for material breach pursuant to Section 11.3.3 within its sole and absolute discretion.

5.4 **Regulatory Authority Generated Delay**. If Avro is unable to meet any milestone timeline as noted in Section 5.1.1 or Section 5.1.2 as a result of the relevant Regulatory Authority requesting additional information or data or other Regulatory Authority delay, UHN and Avro shall negotiate in good faith, and acting reasonably, to agree upon the amount of time required to fulfill such request, and the relevant Section 5.1 milestone shall be extended by such amount of time.

5.5 **Licensed Product Development Milestone Payments**. UHN shall be paid the following one-time milestone payments for a first Licensed Product to reach such milestone (irrespective of indication and/or therapeutic area). Avro shall promptly provide Notice to UHN of the fulfillment of a milestone (whether fulfilled by Avro or its Affiliate or Sublicensee), and each noted milestone payment shall be due and payable by Avro within [***] from the date that such milestone is met, subject to the payment deferral terms of Section 5.7:

5.5.1 [***]; and

5.5.2 [***].

5.6 **[Reserved]**.

5.7 **Payment Deferral**. In respect of reimbursable patent costs (pursuant to Section 4.3), and milestone payments owed further to Section 5.5, (but only for such patent costs directly reimbursable by Avro and such milestones which have been achieved by Avro, and not by any acquirer or Sublicensee who achieves such milestone or is responsible for any such patent cost reimbursement), payment shall remain due as indicated in the

aforementioned section(s), but the Parties agree that any amount due and payable that exceeds [***] percent ([***]%) of the total amounts (i.e. gross total) of any investment raise(s) and financing(s) (e.g. any of seed financing, Series A Financing, Series B Financing or other series of financing) up to such date for which the relevant milestone and/or patent costs are due shall be deferred to the next investment raise/financing. As such, any outstanding amounts shall become payable upon the next investment raise, again subject to [***] percent ([***]%) cap of the total amount (i.e. gross total) of such investment raise/financing until such time as all unpaid amounts are paid in full. All unpaid amounts will collect interest as further set out in Section 4.8. All unpaid and deferred amounts owed pursuant to this Section 5.7 will become immediately payable upon the earlier to occur of: (a) closing of a merger or acquisition of Avro, (b) sale of substantially all of Avro's assets (including this Agreement) relating to the Licensed Products to a non-Affiliated Third Party during the term of this Agreement, (c) Avro granting an exclusive sublicense under the Licensed Technology to a Third Party for purposes of commercializing Licensed Products, or (d) upon an initial public offering (IPO) of Avro shares.

5.8 **Regulatory Approval Milestone Payments**. UHN shall be paid the following milestone payments in respect of each Licensed Product(s). Avro shall promptly provide Notice to UHN of the fulfillment of a milestone (whether such milestone is achieved by Avro or its Affiliate or Sublicensee). Each noted milestone payment is payable by Avro within [***] from the date that such milestone is met:

5.8.1 [***];

5.8.2 [***]; and

5.8.3 [***].

5.9 **[Reserved]**.

ARTICLE 6 - REPRESENTATIONS, WARRANTIES AND LIABILITY

6.1 **UHN Reps & Warranties**. UHN represents, warrants and covenants to Avro that:

6.1.1 it is duly incorporated and organized and validly existing under the laws of Ontario, and has all requisite corporate power and authority to enter into and perform its obligations under the Agreement;

6.1.2 it has taken all necessary corporate action, steps and proceedings to approve or authorize, validly and effectively, the execution and delivery of this Agreement and perform its obligations hereunder;

6.1.3 the execution and delivery of this Agreement by UHN and the performance of its obligations under the Agreement shall not result in either a breach or violation of any of the provisions of, or constitute a default under, or conflict with or cause the acceleration of, any obligation of UHN under:

(a) any agreement to which UHN is a party or is otherwise bound by;

(b) any judgment, decree, order or award of any court, governmental body or arbitrator having jurisdiction over UHN;

(c) any license, permit, approval, consent or authorization held by UHN; or

(d) any applicable law, statute, ordinance, regulation or rule;

6.1.4 as on the Effective Date, UHN is the sole owner of all right, title and interest in and to the Licensed Patents then listed in Schedules "C"; and

6.1.5 UHN will disclose all Improved Therapies that exist as of the Effective Date and of which UHN has knowledge, within [***] of the Effective Date.

6.2 Avro Reps & Warranties. Avro represents and warrants to UHN that:

6.2.1 it is duly incorporated and organized and validly existing under the laws of the State of Delaware and has all the requisite corporate power and authority to enter into and perform its obligations under the Agreement;

6.2.2 it has taken all necessary corporate action, steps and proceedings to approve or authorize, validly and effectively, the execution and delivery of the Agreement and the performance of its obligations hereunder and to cause all necessary meetings of directors and shareholders of Avro to be held for such purposes;

6.2.3 the execution and delivery of this Agreement by Avro and the performance of its obligations hereunder shall not result in either a breach or violation of any of the provisions of, or constitute a default under, or conflict with or cause the acceleration of, any obligation of Avro under:

(a) any agreement to which Avro is a party or is otherwise bound by;

(b) any of the terms and provisions of the organizing documents or bylaws, or resolutions of the board of directors (or any committee thereof), of Avro;

(c) any judgment, decree, order or award of any court, governmental body or arbitrator having jurisdiction over Avro;

(d) any license, permit, approval, consent or authorization held by Avro; and

(e) any applicable law, statute, ordinance, regulation or rule.

6.3 Limitations of Liability. EXCEPT AS OTHERWISE EXPRESSLY SET OUT IN THIS AGREEMENT:

6.3.1 EACH PARTY EXPRESSLY DISCLAIMS ANY AND ALL IMPLIED OR EXPRESS WARRANTIES AND MAKES NO EXPRESS OR IMPLIED WARRANTIES OF ANY KIND, INCLUDING WARRANTIES OF MERCHANTABILITY, SAFETY OR FITNESS FOR ANY PARTICULAR PURPOSE OF THE LICENSED TECHNOLOGY, OR THAT THE LICENSED TECHNOLOGY CAN BE EXPLOITED TO GENERATE REVENUES;

6.3.2 UHN DOES NOT WARRANT OR REPRESENT THAT ISSUED PATENTS ARE VALID, OR PENDING PATENT APPLICATIONS WILL ISSUE, OR WHEN ISSUED WILL BE VALID, OR THAT THE PRACTICE OR EXPLOITATION OF ANY LICENSED TECHNOLOGY PROVIDED PURSUANT TO THIS AGREEMENT, DOES NOT, OR WILL NOT, CONSTITUTE INFRINGEMENT OF RIGHTS OF THIRD PARTIES;

6.3.3 NEITHER PARTY SHALL BE LIABLE TO THE OTHER PARTY FOR ANY INDIRECT, SPECIAL, CONSEQUENTIAL, EXEMPLARY OR PUNITIVE DAMAGE OR LOSS OF BUSINESS OR LOSS OF PROFITS SUFFERED BY SUCH OTHER PARTY RESULTING FROM THE USE OR OTHER EXPLOITATION OF THE LICENSED TECHNOLOGY, INCLUDING WITHOUT LIMITATION THE SALE OF ANY LICENSED PRODUCTS. FURTHERMORE, UHN MAKES NO REPRESENTATION THAT THE LICENSED TECHNOLOGY IS FREE FROM DEFECT OR LIABILITY OF INTELLECTUAL PROPERTY INFRINGEMENT.

ARTICLE 7 - FURTHER COVENANTS AND OBLIGATIONS

7.1 **Avro Covenants/Obligations**. Avro covenants and agrees for the benefit of UHN that it shall:

7.1.1 use reasonable efforts to provide Notice to UHN in the event that the Principal Investigator becomes a shareholder of Avro;

7.1.2 not engage the Principal Investigator or other UHN employees for the conduct of research activities utilizing UHN resources and/or facilities absent a Sponsored Research Agreement or such other appropriate agreement, or otherwise the written consent of UHN; provided, for clarity, that this Section **7.1.2** shall apply to the Principal Investigator in his appointment and scientific research at UHN only (and not with respect to any other university, hospital, facility, institution or entity);

7.1.3 use commercially reasonable efforts to exercise the License granted herein and otherwise exploit the Licensed Technology in accordance with the terms of this Agreement, and with all applicable laws, statutes, ordinances, regulations, guidelines and rules, including all applicable statutes and regulations and applicable guidelines set forth by the Canadian Institutes of Health Research (CIHR), National Institutes of Health (NIH) or other governmental agencies where applicable;

7.1.4 ensure that all of its employees, representatives, agents, consultants, Sublicensee(s), Affiliate(s) and any other Third Parties having access to the subject matter of this Agreement are aware of any and all confidentiality obligations, and are legally bound by similar obligations;

7.1.5 cause to be applied to Licensed Product(s) (as appropriate) any markings required by applicable government statutes and laws to maintain continued validity and enforcement of proprietary rights in Licensed Technology (as applicable);

7.1.6 ensure that the terms and conditions of any Sublicense are consistent with the terms and conditions of this Agreement; and

7.1.7 in addition to any diligence requirements or obligations of this Agreement, use commercially reasonable efforts to develop and commercialize one or more Licensed Products.

7.2 **UHN Covenants**. UHN covenants and agrees for the benefit of Avro that it shall:

7.2.1 ensure that all employees, staff members, students, and any other UHN agents or representatives having access to the subject matter of this Agreement are aware of any and all obligations under this Agreement, including confidentiality obligations, and have agreed to be legally bound by them;

7.2.2 use reasonable best efforts to conduct and enroll and dose at least [***] patients in the UHN Planned Trial with a [***] follow-up phase; provided, however, that UHN shall not be deemed to be in breach of the foregoing obligation in the event that UHN discontinues the UHN Planned Trial due to events outside of the reasonable control of UHN (i.e., actions taken by Regulatory Authorities, due to a material safety issue of a Licensed Product, or due to Avro's uncured breach of its payment obligations in the Letter Agreement); and

7.2.3 not grant any rights in the Licensed Technology to any Person that would conflict with the rights granted to Avro hereunder.

ARTICLE 8 - MANAGEMENT OF INTELLECTUAL PROPERTY RIGHTS

8.1 **Responsibility for Patent Rights**. Avro will assume responsibility for the preparing, filing, prosecuting, maintaining and defending in all agency proceedings (e.g., reissues, reexaminations, oppositions and interferences), using patent counsel reasonably acceptable to UHN, patent rights within the Licensed Technology to the extent such patent rights are relevant to the Field of Use, or Avro is otherwise deemed to be responsible for prosecution in accordance with the terms of a Sponsored Research Agreement ("**Field Patent Rights**") during the Term. Avro shall copy UHN on all patent prosecution documents and give UHN reasonable opportunities to advise Avro on such filing, prosecution and maintenance. In the event Avro desires to abandon any patent or patent application within the Field Patent Rights, Avro shall provide UHN with reasonable prior written notice of such intended abandonment or decline of responsibility. If UHN elects to continue such patent or patent application, the Parties shall consult and Avro may elect to retain responsibility therefor. Otherwise, the right to prepare, file, prosecute, maintain and defend the relevant Field Patent Rights, at UHN's expense, shall revert to UHN. In such event, such UHN paid-for rights shall be removed from the definition of Licensed Patents under this Agreement and the licenses granted to Avro and its Affiliates as to such rights shall terminate. UHN retains its rights to prepare, file, prosecute, and maintain, and defend in all agency proceedings (e.g. reissues, reexaminations, oppositions and interferences), at UHN's expense, patent rights within the Licensed Technology that are relevant outside the Field of Use ("**UHN Patent Rights**"). To the extent that patent rights are relevant both inside and outside the Field of Use, during the Option Term the Parties shall work cooperatively to make decisions with respect to preparing, filing, prosecuting, maintaining and defending such patent rights in all agency proceedings such that neither Party's rights are jeopardized.

8.2 **Patent Extensions and Orange Book Listings**. If elections with respect to obtaining patent term extensions (including, without limitation, any available pediatric extensions) or supplemental protection certificates or their equivalents in any country with respect to Field Patent Rights are available, Avro shall have the sole and exclusive right to make any such elections based on Licensed Products. With respect to data exclusivity periods (such as those periods listed in the FDA's Orange Book (including, without limitation, any available pediatric extensions) or periods under national implementations of Article 10.1(a)(iii) of Directive 2001/EC/83 or orphan exclusivity periods, and all equivalents in any country), Avro shall have the sole and exclusive right to seek and maintain all such data exclusivity periods available for the Licensed Products. With respect to all of the rights and activities identified in this Section 8.2, UHN hereby appoints Avro as its agent for such purposes with the authority to act on UHN's behalf with respect to the Field Patent Rights in a manner consistent with this Agreement.

8.3 **Notification of Infringement**. Each Party agrees to provide written notice to the other Party promptly after becoming aware of any infringement of the Field Patent Rights or UHN Patent Rights by a Third Party and of any available evidence thereof.

8.4 **Right to Prosecute Infringements**.

8.4.1 **Avro Right to Prosecute**. As between the Parties, Avro shall have the first and exclusive right, but not the obligation, under its own control and at its own expense, to prosecute any Third Party infringement of the Field Patent Rights and/or UHN Patent Rights, subject to Sections 8.5 and 8.6. The total cost of any such infringement action commenced or defended solely by Avro shall be borne by Avro.

8.4.2 **UHN Right to Prosecute**. If within [***] after having been notified of any alleged infringement that is material and competitive in the marketplace Avro is unsuccessful in persuading the alleged infringer to desist and shall not have brought and shall not be diligently prosecuting an infringement action, then UHN shall have the right, but shall not be obligated, under its own control and at its own expense, to prosecute any infringement of the Field Patent Rights and/or UHN Patent Rights.

8.5 **Declaratory Judgment Actions**. If a declaratory judgment action is brought naming UHN or Avro or any of its Affiliates or Sublicensees as a defendant and alleging invalidity, unenforceability or non-infringement of any Field Patent Rights and/or UHN Patent Rights, Avro or UHN, as the case may be, shall promptly notify the other Party in writing. With regards to the Field Patent Rights, or to the extent litigation of the UHN Patent Rights remain under UHN's control, Avro may elect, upon written notice to UHN within [***] after receiving or giving notice of the commencement of such action, to take over the sole control of such action at its own expense. If Avro does not defend any such action, then UHN shall have the right, but shall not be obligated, to defend such action at UHN's expense.

8.6 **Recovery**. In the event that either Party exercises the rights conferred in this Article 8 and recovers any damages or other sums in such action, such damages or other sums recovered shall first be applied to all out-of-pocket costs and expenses incurred by the Parties in connection therewith (including, without limitation, attorneys fees). If such recovery is insufficient to cover all such costs and expenses of both Parties, [***]. If after

such reimbursement any funds shall remain from such damages or other sums recovered, such funds shall be retained by the Party that controlled the action or proceeding under this Article 8; provided, however, that (a) if Avro is the Party that controlled such action or proceeding, the remaining recovery received by Avro shall be shared [***] allocated to Avro, [***]) allocated to UHN, and (b) if UHN is the Party that controlled such action or proceeding, the remaining recovery received by UHN shall be shared [***] allocated to UHN, [***] allocated to Avro.

8.7 **Cooperation**. Each Party agrees to cooperate in any action under this Article 8 which is controlled by the other Party, including, without limitation, joining such action as a party plaintiff if necessary or desirable for initiation or continuation of such action; provided that the controlling Party reimburses the cooperating Party promptly for any reasonable costs and expenses incurred by the cooperating Party in connection with providing such assistance.

8.8 **Patent Certifications**. UHN shall notify and provide Avro with copies of any allegations of alleged patent invalidity, unenforceability or non-infringement of a Patent Right pursuant to a Paragraph IV Patent Certification by a Third Party filing an Abbreviated New Drug Application, an application under §505(b)(2) or any other similar patent certification by a third party, and any foreign equivalent thereof. Such notification and copies shall be provided to Avro within [***] after UHN receives such certification.

8.9 **Patent Challenges**. UHN will have the right to terminate this Agreement in full upon [***] prior written notice to Avro in the event that Avro or any of its Affiliates or Sublicensees (to the extent related to rights granted to a Sublicensee under this Agreement) institutes any claim in a legal or administrative proceeding challenging the validity of any Licensed Patents (except as a defense against a claim, action or proceeding asserted by UHN against Avro or its Affiliates or Sublicensees) (a "**Patent Challenge**")**;** provided, with respect to any such Patent Challenge by any Sublicensee of Avro, UHN will not have the right to terminate this Agreement under this Section 8.9 if Avro (a) causes such Patent Challenge to be terminated or dismissed or (b) if permitted in accordance with applicable Law, terminates such Sublicensee's sublicense to the Licensed Patents being challenged by the Sublicensee, in each case ((a) and (b)) within [***] of UHN's notice to Avro under this Section 8.9. Notwithstanding the foregoing, UHN's termination right under this Section 8.9 will not apply to any Affiliate of Avro that first becomes an Affiliate of Avro after the Effective Date of this Agreement in connection with a License Transfer, where such Affiliate of Avro was undertaking activities in connection with a Patent Challenge prior to such License Transfer.

ARTICLE 9 - CONFIDENTIAL INFORMATION

9.1 **Confidentiality**. The Receiving Party shall take all reasonable measures, and at least the same measures as it takes in respect of its own Confidential Information of a similar nature, to keep confidential the Confidential Information of the Disclosing Party. The Receiving Party may disclose such Confidential Information to those of its directors, officers, employees, subcontractors, consultants and agents (collectively, "**Representatives**") having a need to know such information in connection with exercising the Receiving Party's rights and/or fulfilling the Receiving Party's obligations under this Agreement. With respect to Avro, Representatives also include Affiliates and proposed and actual Sublicensee(s). The Receiving Party will ensure that any of its Representatives having access to the Confidential Information of the Disclosing Party

are under a legal obligation to maintain such Confidential Information in confidence and are duly informed of this obligation. The Receiving Party will neither use nor disclose to any other party any of the Confidential Information of the Disclosing Party except as expressly permitted under this Agreement. The terms of this Agreement are the Confidential Information of both Parties. During the Term, information relating to Licensed Product(s) in the Field of Use is the Confidential Information of Avro. The confidentiality provisions as outlined in this Article 9 shall survive expiration or earlier termination of this Agreement for a period of [***].

9.2 **Equitable Relief / Disputes**. The Parties acknowledge that a breach of this Article 9 by either Party or any of its Representatives may cause irreparable harm and that, notwithstanding any other term or provision of this Agreement, the non-breaching Party may be entitled to equitable relief, including injunction and specific performance, as a remedy for any such breach. Such remedies shall not be deemed to be the exclusive remedies but shall be in addition to all other remedies available at law or equity.

9.3 **Disclosure to Advisors**. Notwithstanding the confidentiality obligations of this Agreement, each Party shall be permitted to disclose the terms of this Agreement without the prior written consent of the other Party to those of its [***].

9.4 **Other Permitted Disclosures**. Notwithstanding the confidentiality obligations of this Agreement, the Receiving Party shall be permitted to disclose the Confidential Information of the Disclosing Party or any other information associated with the Agreement, without the prior written consent of the Disclosing Party, (a) to the extent required to be disclosed by law (including access to information laws, securities laws, regulations and listing requirements in Canada, United States and other jurisdictions) or an order of a court, tribunal, or government agency, provided that to the extent legally permissible the Receiving Party (i) gives to the Disclosing Party prompt written notice of the required disclosure of any Confidential Information in order to allow the Disclosing Party reasonable opportunity to seek a confidentiality order or the like, and (ii) cooperates with efforts of the Disclosing Party (at the Disclosing Party's expense) in connection therewith; and (b) as required to be disclosed in connection with the filing with, or approval, certification or endorsement from, any governmental body or medical protocol, in each case for a Licensed Product(s), provided that the information disclosed pursuant to this clause (b) is not the inventive subject matter of an unpublished patent application.

9.5 **Press Releases**. Avro or its Affiliates may prepare and disclose via press release any Patient Data for the UHN Planned Trial (a) after an academic publication, interim report, abstract or presentation of data/results from the UHN Planned Trial has been made or authorized by Dr. Jeff Medin or any other clinical trial site ("**Interim Disclosure**") (such publication or presentation subject to Sections 10.1 and 10.2) but restricted as follows: (i) the UHN Planned Trial data and results referred to or otherwise discussed in the press release shall be limited to published data/results and (ii) the UHN Principal Investigator shall be granted a reasonable opportunity to review and comment on the accuracy of technical and scientific data and conclusions relating to same prior to publication of the press release; or (b) as required by applicable laws, rules or regulations (including a press release corresponding to any securities disclosure, such as pursuant to a Form 8-K), including by the rules or regulations of the United States Securities and Exchange Commission or similar regulatory agency in a country other than the United States or of any stock exchange or listing entity. The intention of Dr. Jeff

Medin as of the Effective Date is to publish or present interim data, in one or more forums, as is reasonable in light of the data generated during the UHN Planned Trial. For clarity, the restrictions set forth in this paragraph apply only to the UHN Planned Trial.

Subject to Section 10.2.1, Avro or its Affiliates may prepare and disclose via any press release, publication or presentation any data, results or reports relating to the Licensed Products (including with respect to the Licensed Technology) in Avro's sole discretion without prior review and/or approval by UHN or Dr. Jeff Medin, other than the Patient Data for the UHN Planned Trial which is addressed by the paragraph above.

Other than as agreed to by the Parties, UHN shall only issue press releases with respect to the Licensed Technology in accordance with Sections 10.1 and 10.2.2.

ARTICLE 10 - PUBLICATION

10.1 **Publications**. Avro recognizes that, under UHN policies further to its obligations and responsibilities as an academic and teaching/research hospital affiliated with the University of Toronto, the results of research conducted at UHN (including ongoing research of the Principal Investigator with respect to the Licensed Technology) and research conducted jointly with other institutions (the UHN Planned Trial) must be publishable, and as such agrees that the Principal Investigator or the researchers employed by UHN who are engaged in any such research, as well as their collaborators, shall be permitted to present at symposia, national, or regional professional meetings, and to publish in journals, theses or dissertations, or otherwise, the methods and results of such research. Avro shall be furnished a copy of any proposed (a) publication (including publication in conjunction with collaborators under the UHN Planned Trial) at least [***] before submission of such proposed publication, and (b) public oral presentation/seminar at least [***] before delivery of such presentation/seminar. During that time, Avro shall have the right to (i) review the material for Confidential Information provided by Avro and (ii) assess the patentability of any invention described in the material. If Avro decides that a patent application should be filed, the publication or presentation may, at Avro's request, be delayed an additional [***]. At Avro's request, Confidential Information provided by Avro shall be deleted. Publications submitted by UHN to Avro pursuant to this Section 10.1 shall remain confidential, and may only be made the subject of a press release by Avro or its Affiliates (A) after the date of the first publication or disclosure, or (B) as permitted pursuant to Section 9.5.

10.2 **Use of Names / Additional Permitted Disclosures**.

10.2.1 Avro and its Affiliates and Sublicensees shall not use the name of "University Health Network" or any variation, adaptation, or abbreviation thereof, or of any of its trustees, officers, faculty, students, employees, clinical staff or agents, or any trademark owned by UHN, or any terms of this Agreement in any promotional material or other public announcement or disclosure without the prior written consent of UHN. The foregoing notwithstanding, without the consent of UHN, Avro may indicate that it is licensed by UHN under the Licensed Technology and identify the inventors (including the Principal Investigator), their affiliation with UHN, and their relationship to Avro, and further, Avro may comply with disclosure requirements of all applicable laws relating to its business, including, without limitation, United States and state securities laws.

10.2.2 UHN shall not use the name of Avro or its Affiliates or Sublicensees or any variation, adaptation, or abbreviation thereof, or of any of their respective Representatives, or any trademark owned by Avro or its Affiliates or Sublicensees, or any terms of this Agreement in any promotional material or other public announcement or disclosure without the prior written consent of Avro or its Affiliates or Sublicensees (as applicable). Notwithstanding any term or provision of this Agreement (including any obligation of Confidentiality), without the consent of Avro, UHN may indicate that it has licensed the Licensed Technology to Avro and identify the inventors (including the Principal Investigator), his affiliation with UHN, his relationship (if any) to Avro, and the achievement of clinical, regulatory or commercialization milestones hereunder and, to the extent required by applicable law, sums of monies received by UHN; and further, UHN may comply with disclosure requirements of all applicable laws relating to its business, including, without limitation, Provincial and Federal access to information laws.

ARTICLE 11 - TERM & TERMINATION

11.1 **Term**. Unless terminated pursuant to Sections 11.2, the term of this Agreement shall commence on the Effective Date and shall remain in effect until the expiration of the Royalty Term for all Licensed Products, unless earlier terminated in accordance with the provisions of this Agreement or otherwise mutually agreed (the "**Term**").

11.2 **Voluntary Termination by Avro**. Avro shall have the right to terminate this Agreement, for any reason, upon at least [***] prior written notice to UHN, such notice to state the date at least [***] in the future upon which termination is to be effective.

11.3 **Termination for Default**.

11.3.1 **Nonpayment and Insurance**. In the event Avro fails to pay any undisputed amounts due and payable to UHN hereunder, and fails to make such payments within [***] after receiving written notice of such failure, or in the event that Avro fails to have or maintain insurance as outlined in Section 13.6, UHN may terminate this Agreement upon written notice to Avro, subject to completion of the dispute resolution process set forth in Section 14.1 and Section 14.2 and a final determination pursuant to mandatory arbitration under Section 14.3 and unless otherwise cured further to said process as outlined therein.

11.3.2 **Material Breach by UHN**. In the event UHN commits a material breach of its obligations under this Agreement, and fails to cure that breach within [***] after receiving written notice thereof, Avro may terminate this Agreement immediately upon written notice to UHN, subject to completion of the dispute resolution process set forth in Section 14.1 and Section 14.2 unless otherwise cured further to said process as outlined therein.

11.3.3 **Material Breach by Avro**. In the event Avro commits a material breach of its obligations under this Agreement, except for breach as described in Section 11.3.1, and fails to cure that breach within [***] after receiving written notice thereof, UHN may terminate this Agreement immediately upon written notice to Avro, subject to completion of the dispute resolution process set forth in Section 14.1 and Section 14.2 unless otherwise cured further to said process as outlined therein.

11.3.4 **Modification for Material Breach by UHN of Sections 2.1, 2.4, 6.1, 7.2.2, or 7.2.3 or Article 9**. Notwithstanding any other provisions of this Agreement and in addition to the deductions otherwise permitted under this Agreement, (a) if Avro has the right to terminate this Agreement under Sections 2.1, 2.4, 6.1, 7.2.2, or 7.2.3 or Article 9 as a result of an uncured breach which has a demonstrable material impact on Avro (including expiration of all applicable cure periods thereunder and final determination pursuant to mandatory arbitration under Section 14.3), in lieu of exercising such termination right, Avro may elect by written notice to UHN before the end of such applicable cure period to have this Agreement continue in full force and effect and instead have, starting immediately after the end of such applicable cure period, each of the following will be reduced by [***] percent ([***]%): any future milestone payments payable under Sections 5.5 or 5.8, any Royalties under Section 4.5, any Sublicensing Revenue sharing under Section 4.6 and any License Transfer Fee attributable to this Agreement (but not the IL-12 Agreement) under Section 16.4.2.

11.3.5 **Modification for Material Breach by UHN of Letter Agreement**, **Supply Agreement or Purchase Order(s)**. If UHN or the Principal Investigator breaches any obligations pursuant to the Letter Agreement, Supply Agreement or Purchase Order(s), and said breach has a demonstrable material impact on Avro, and is not cured within [***] of notification of said breach, each of the following will be reduced by [***] percent ([***]%): any future milestone payments payable under Sections 5.5 or 5.8, any Royalties under Section 4.5, any Sublicensing Revenue sharing under Section 4.6 and any License Transfer Fee attributable to this Agreement (but not the IL-12 Agreement) under Section 16.4.2.

11.4 **Bankruptcy**. UHN may terminate this Agreement upon written notice to Avro if Avro becomes insolvent, is adjudged bankrupt, applies for judicial or extrajudicial settlement with its creditors, makes an assignment for the benefit of its creditors, voluntarily files for bankruptcy or has a receiver or trustee (or the like) in bankruptcy appointed by reason of its insolvency, or in the event an involuntary bankruptcy action is filed against Avro and not dismissed within [***], or if Avro becomes the subject of liquidation or dissolution proceedings or otherwise discontinues business.

11.5 **Disputed Termination Right**. If the non-terminating Party disputes in good faith the right of the other Party to terminate this Agreement for any reason other than Avro's right to terminate for convenience pursuant to Section 11.2, and such non-terminating Party provides the terminating Party written notice of such dispute within [***] after the terminating Party's notice, as applicable, then the terminating Party will not have the right to terminate this Agreement unless and until the Parties have followed with the dispute resolution mechanism as outlined in Section 14.1 and Section 14.2 and, as required, final determination pursuant to mandatory arbitration under Section 14.3, after which time the terminating Party has the right to terminate this Agreement in accordance with the terms and conditions set forth herein. It is understood and agreed that (a) during the pendency of such dispute, all of the terms and conditions of this Agreement will remain in effect, and (b) the non-terminating Party will have the right to cure such breach that is the subject matter of the dispute.

11.6 **Effects of Early Termination**. In the event of the termination of this Agreement:

11.6.1 the License will be terminated, all rights to the Licensed Technology shall revert to UHN, and Avro shall cease and desist any further use or exploitation of, and otherwise cease to derive any benefit from, the Licensed Technology, and within [***] either destroy or return to UHN, further to UHN's instructions all of UHN's property, including all Licensed Technology;

11.6.2 each Receiving Party shall return to the Disclosing Party or destroy (as directed by a Disclosing Party) all copies of said Disclosing Party's Confidential Information in a manner consistent with any applicable laws and regulations;

11.6.3 Avro shall within [***] of the date of such termination, pay UHN all current amounts then owed to UHN pursuant to this Agreement. For purposes of certainty and clarity, no term or provision of this Agreement shall be construed to waive the payment of any monies to UHN accrued at the date of said termination, or arising thereafter;

11.6.4 the Parties shall take all necessary steps in a prudent business manner to wind-down any ongoing activities and to effect the orderly termination of this Agreement; and

11.6.5 Avro and its Affiliates and Sublicensees may complete and sell any work-in-progress and inventory of Licensed Products that exist as of the effective date of termination, provided that (a) Avro pays UHN the applicable running royalty or other amounts due on such sales of Licensed Products in accordance with the terms and conditions of this Agreement, and (b) Avro and its Affiliates and Sublicensees shall complete and sell all work-in-progress and inventory of Licensed Products within [***] after the effective date of termination.

ARTICLE 12 - INDEMNIFICATION

12.1 **Indemnification**. Notwithstanding Section 6.3, Avro agrees to indemnify, save harmless, and defend UHN and its directors, officers, research staff, employees, clinical staff, research trainees, students, and agents (collectively, "**UHN Indemnitees**"), against any and all Third Party claims, suits, losses, damages, costs, fees, and expenses (including reasonable legal expenses) (collectively, "**Claims**"), arising out of (a) any liability claims with respect to any Licensed Product(s), (b) any Third Party intellectual property infringement or alleged infringement claims with respect to Licensed Product(s), and (c) any damages, losses, or liabilities whatsoever with respect to death or injury to any person and damage to any property arising from this Agreement and the License, including, without limitation, the manufacture, design, distribution, and offer for sale of Licensed Product(s) or otherwise arising from any exploitation of the Licensed Technology, except in each case to the extent caused by the negligence or willful misconduct of UHN Indemnitees or a breach of this Agreement by UHN.

ARTICLE 13 - INSURANCE

13.1 **Avro Insurance**. No later than [***] prior to the earlier of the (a) first use by Avro of Licensed Technology in humans, or (b) first sale by Avro of Licensed Product(s), Avro (at its expense) shall obtain and maintain (as appropriate) general liability, product

liability and clinical trial liability insurance (the "**Avro Insurance**") of a minimum of [***] per occurrence and [***] annual aggregate, naming UHN as an additional insured. Avro shall provide to UHN a "**Certificate of Insurance**" evidencing compliance with this provision within [***] prior to such first use. Avro shall, at its own expense, obtain and maintain the Avro Insurance from the initial date required by this Section 13.1 for the Term and for a period of [***] thereafter. In the alternative, Avro may self-insure subject to prior approval of UHN.

13.2 **Sublicensee Insurance**. Unless said activities are otherwise covered by Avro Insurance, any Sublicense shall require Sublicensee(s), at the Sublicensee(s) expense, to obtain and maintain liability insurance at a level commensurate with the Avro Insurance, naming Avro and UHN as additional insured; provided however, that if the Sublicensee is a substantial multi-national entity which has a policy of self-insuring, then Sublicensee may self-insure. Sublicense agreements shall require Sublicensee(s) to provide to Avro and to UHN a Certificate of Insurance evidencing compliance with this provision prior to the earlier of the first use of the Licensed Technology in humans or first sale of Licensed Product(s) under any Sublicense. In no event shall the Sublicensee(s) use the Licensed Technology in humans or engage in the sale of Licensed Product(s) under this or any Sublicense agreement prior to the delivery to UHN of the Certificate of Insurance or an indication of self-insurance, as applicable. The Sublicense shall provide that Sublicensee(s) (at no expense to UHN) shall obtain and maintain from the initial date required by this Section 13.2 until the end of the term of the Sublicense and an additional period of [***] thereafter, a policy of appropriate liability insurance (or self-insurance, if applicable) at a level commensurate with the Avro Insurance. In the event that Sublicensee does not have the insurance coverage required by this Section 13.2, Avro shall terminate said Sublicense or otherwise ensure subject to UHN prior approval, that the activities of said Sublicensee are insured by Avro.

13.3 **Qualified Insurance**. All insurance policies required in accordance with this Article 13 shall be obtained from an insurance company qualified to offer protection in the jurisdictions where Licensed Technology is to be exploited or Licensed Product(s) are offered for sale.

13.4 **Notice**. Avro shall provide [***] written notice to UHN by registered or certified mail in the event of any modification, cancellation or termination of such insurance policy.

13.5 **Copy of Policy**. Avro shall, on written request, provide UHN with a copy of the insurance policy in force at the time of the request and this provision shall survive the termination of this Agreement for a period of [***].

13.6 **Incomplete Insurance**. In the event Avro does not have the insurance coverage required by this Article 13, or if any portion of the Avro Insurance or other required coverage is cancelled and not immediately replaced, Avro shall promptly inform UHN and UHN shall be free to terminate this Agreement upon notice to Avro in accordance with Section 11.3.1.

ARTICLE 14 - DISPUTE RESOLUTION

14.1 **Good Faith Efforts**. Except as otherwise stated in this Agreement, the Parties agree to use good faith efforts to resolve amicably among themselves any dispute arising out of or relating to this Agreement.

14.2 **Referral for Resolution**. If the Parties are unable to resolve the dispute under Section 14.1 within [***] of written notice of one Party to the other Party of such dispute, the dispute shall be referred to the Executive Vice President, Research of UHN (or designate) and the CEO (or designate) of Avro for their discussion and resolution for an additional period of [***].

14.3 As mandated by Sections 4.6, 11.3.1, 11.3.2, 11.3.3 or 11.5, if a dispute is not resolved pursuant to Section 14.2, and mandatory arbitration is thereafter dictated, such dispute shall be finally settled under mandatory arbitration (such decision to be final and non-appealable) pursuant to the Rules of Arbitration of the International Chamber of Commerce ("**ICC**"). The legal place of arbitration shall be Toronto and the official language of the arbitration shall be English. The arbitration will be heard and determined by three (3) arbitrators who are retired judges or attorneys with at least ten (10) years of relevant experience in the pharmaceutical and biotechnology industry, each of whom will be impartial and independent. Each Party will appoint one (1) arbitrator and the third (3rd) arbitrator will be selected by the two (2) Party-appointed arbitrators, or, failing agreement within [***] following appointment of the second arbitrator, by the ICC. The arbitration award so given will be a final and binding determination of the dispute, will be fully enforceable in any court of competent jurisdiction, and will not include any damages expressly prohibited under Section 6.3.3. Fees, costs and expenses of arbitration are to be divided by the Parties in the following manner: UHN will pay for the arbitrator it chooses, Avro will pay for the arbitrator it chooses, and the Parties will share payment for the third arbitrator. Except in a proceeding to enforce the results of the arbitration or as otherwise required by Law, neither Party nor any arbitrator may disclose the existence, content or results of any arbitration hereunder without the prior written consent of both Parties.

14.4 **Interim Protection**. This Article 14 shall not prevent a Party from applying to a court of competent jurisdiction for equitable relief or interim protection such as, by way of example, an interim injunction for breaches of confidentiality pursuant to Article 9.

ARTICLE 15 - NOTICE

15.1 **Notice**. All notices which are required or permitted to be given hereunder ("**Notices**") including judicial payment notices must be in writing. All such Notices must be sent as follows:

to UHN:

Attention:
Director, Technology Development & Commercialization
UHN Health Network
101 College Street - Suite 150
Heritage Building - MaRS Centre
Toronto, Ontario, Canada M5G 1L7

to Avro:
AvroBio, Inc.
400 Technology Square, 10th Floor
Cambridge, MA 02139
Attention: CEO

or to such other address as a Party may designate by Notice given in accordance with this Article 15. Any such Notice may be delivered by hand or by overnight courier and will be deemed to have been delivered on the date of delivery.

ARTICLE 16 - GENERAL

16.1 **Entire Agreement**. The Parties acknowledge that this Agreement its Schedules, any SRAs, the Material Transfer Agreement, the Letter Agreement and any other related document required to effect the contemplated transactions, shall be the entire agreement and understanding of the Parties as to the subject matter of this Agreement, and supersedes all prior discussions, agreements and writings in respect of the subject matter of this Agreement, including, without limitation the Option Agreement. For the avoidance of doubt, this Agreement does not amend, restate, supplement or otherwise modify any of the terms or conditions of any other agreement between the Parties, including the IL-12 Agreement. The IL-12 Agreement shall remain in full force and effect in accordance with its terms and conditions.

16.2 **General Assurances**. The Parties agree to do all such things and to execute such instruments and documents as may be necessary or desirable in order to carry out the provisions and intent of this Agreement.

16.3 **Inure to Benefit**. This Agreement shall inure to the benefit of and be binding upon the respective Parties and, where the context admits or requires, their respective permitted successors or assigns.

16.4 **Assignment**.

16.4.1 Avro may assign its rights and obligations under this Agreement to (a) an Affiliate or (b) a Third Party in connection with the merger, consolidation, reorganization, or sale of all or substantially all of its assets or that portion of its business to which this Agreement relates.

16.4.2 In the event of (a) a merger or acquisition of Avro by a Third Party during the Term or (b) a sale of all or substantially all of Avro's assets (including this Agreement) relating to the Licensed Products to a Third Party during the Term (respectively a "**License Transfer**"), a "**License Transfer Fee**" shall be payable to UHN equal to [***] percent ([***]%) of proceeds from the License Transfer, subject to a total cap of License Transfer Fees as between this Agreement and any License Transfer Fee payable under the IL-12 Agreement of [***]. For certainty and clarity, a License Transfer shall exclude any equity or debt financing (other than, for clarity, in connection with a sale of all or substantially of Avro's assets (including this Agreement) relating to the Licensed Products to a Third Party), any initial public offering, or any transaction involving Avro or its Affiliates in which the stockholders of Avro or its Affiliates immediately preceding such transaction retain fifty percent (50%) or more of the outstanding shares, or fifty percent (50%) or more of the outstanding voting power, respectively, of the ultimate company or entity resulting from such transaction immediately after consummation thereof.

16.4.3 The License Transfer Fee payable in respect of the License Transfer will be due within [***] of the closing of the License Transfer (or actual receipt of consideration in the event of scheduled payments for the License Transfer), and will be payable in the same type of consideration (e.g., cash, securities, etc.) received by Avro or its stockholders. The License Transfer Fee shall only apply with respect to the first License Transfer and not with respect to any subsequent License Transfers. Notwithstanding the foregoing, (sub)licenses, licenses to manufacture, or licenses for distribution relating to Licensed Products or Licensed Technology, or sales of assets, (sub)licenses, licenses to manufacture, licenses for distribution or other transactions relating to other products, etc. shall not be deemed a License Transfer hereunder. The License Transfer Fee shall be in addition to any distributions due to UHN as a shareholder in Avro.

16.5 **No Joint Venture**. Each Party is and will remain at all times independent of each other. The Parties are not and shall not be considered to be joint venturers, partners or agents of each other and neither of them shall have the power to bind or obligate the other except as set forth in this Agreement. The Parties mutually covenant and agree that neither shall they, in any way, incur any contractual or other obligation in the name of the other, nor shall they have liability for any debts incurred by the other. No representation will be made or acts taken by any of the Parties which could establish any apparent relationship of agency, joint venture, partnership or employment.

16.6 **Waiver**. No amendment, supplement or waiver of any provision of this Agreement shall be binding on any Party unless consented to in writing by such Party. No waiver of any provision of this Agreement shall constitute a waiver of any other provision, nor shall any waiver constitute a continuing waiver unless otherwise expressly provided. Further, no failure or delay by any Party in exercising any right or remedy shall operate as a waiver of such right or remedy, nor shall any single or partial exercise or waiver of any right or remedy preclude its further exercise or the exercise of any other right or remedy.

16.7 **Joint Preparation**. This Agreement shall be deemed to be jointly prepared by the Parties, and any ambiguity herein shall not be construed for or against any single Party.

16.8 **Governing Law**. This Agreement shall be governed by the laws of the Province of Ontario and the laws of Canada applicable therein, and shall be treated as an Ontario contract. Subject to Article 14, the Parties irrevocably and unconditionally submit to the exclusive jurisdiction the courts of Ontario and all courts competent to hear appeals therefrom in connection with any matters arising under this Agreement, except for disputes under Sections 4.6,11.3.1,11.3.2,11.3.3 or 11.5, each of which shall be addressed pursuant to Section 14.3.

16.9 **Severability of Provisions**. In the event that any provisions of this Agreement is determined to be invalid or unenforceable by a court of competent jurisdiction in any jurisdiction, the remainder of this Agreement shall remain in full force and effect without said provision in said jurisdiction and such determination shall not affect the validity or enforceability of such provision or this Agreement in any other jurisdiction. The Parties shall in good faith negotiate a substitute clause for any provision declared invalid or unenforceable, which shall most nearly approximate the intent of the Parties in entering this Agreement.

16.10 **Force Majeure**. In the event that any one of the Parties is prevented from fulfilling any of its obligations herein by acts of God, war, terrorism, strikes, riots, storms, fires, governmental orders or restrictions or any other cause beyond its control, the payment of royalties or milestones or other required payments, or the applicable pro rata portion thereof, shall be suspended during the full period of any such prevention, but payment of Royalties, Sublicensing Fee(s), milestones or other required payments which have accrued for payment prior to, during or after such cause shall not be excused. UHN will have the right to immediately terminate this Agreement in the event that Avro is unable to fulfill its obligations further to this Section 16.10 for a period of [***].

16.11 **Survival**. The termination or expiration of this Agreement shall not relieve the Parties of any obligations accruing prior to such expiration or termination (including any payments accrued and delayed pursuant to Section 5.7), and any such expiration or termination shall be without prejudice to the rights of either Party against the other Party. Sections 2.3 (last sentence), 4.3, 4.11, 4.12, 4.13, 4.14, 6.3, 11.4, 11.5, 11.6, 12.1, 13.1, and 13.2 and Articles 1,9, 10, 14, 15 and 16 (excluding Section 16.4.2 and 16.4.3 if License Transfer occurs after expiration or termination) shall remain in force and effect after the expiration or earlier termination of this Agreement until such time as specifically noted in a particular Section or Article, or the Parties mutually agree to the release of the obligation (in whole or in part) contained therein.

16.12 **Counterparts**. This Agreement may be executed in counterparts each of which shall be deemed an original but all of which together shall constitute one and the same instrument. Transmission by facsimile, email or other form of electronic transmission of an executed counterpart of this Agreement shall be deemed to constitute due and sufficient delivery of such counterpart. Alternatively, the Agreement may be exchanged and executed by facsimile or other form of electronic transmission as a single document.

[SIGNATURE PAGE FOLLOWS]

The Parties are executing this Agreement so as to be effective on the Effective Date.

UNIVERSITY HEALTH NETWORK

Per: /s/ Bradly G. Wouters
Name: Dr. Bradly G. Wouters
Title: Executive Vice President Science and Research

AvroBio, **Inc**.

Per: /s/ Geoff MacKay
Name: Geoff MacKay
Title: President and Chief Executive Officer

Schedule "A"

Fabry Know-How

[***]	[***]	[***]
[***]	[***]	[***]
	[***]	[***]
[***]	[***]	[***]
	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]		
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]

*** Confidential Treatment Requested ***

[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
	[***]	[***]
	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
	[***]	[***]
	[***]	[***]

[***]
[***]
[***]
[***]

*** Confidential Treatment Requested ***

Schedule B

[***]

[***]

[***]

[***]

[***]

[***]

[***]

[***]

[***]

[***]

[***]

[***]

Schedule "C"

Fabry Patents

[***]

[***]

[***]

[***]

SCHEDULE D

Licensed SRA IP

(as amended and updated)

*** Confidential Treatment Requested ***

SCHEDULE E

Optioned Improvement Patent(s)

(as amended and updated)

*** Confidential Treatment Requested ***

CERTAIN CONFIDENTIAL PORTIONS OF THIS EXHIBIT WERE OMITTED AND REPLACED WITH "[***]". A COMPLETE VERSION OF THIS EXHIBIT HAS BEEN FILED SEPARATELY WITH THE SECRETARY OF THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO AN APPLICATION REQUESTING CONFIDENTIAL TREATMENT PURSUANT TO RULE 406 PROMULGATED UNDER THE SECURITIES ACT OF 1933, AS AMENDED.

LICENSE AGREEMENT

This License Agreement (the "**Agreement**") is made and entered into effective as of **August 31, 2017** (the "**Effective Date**"), by and between

BioMarin Pharmaceutical Inc., a Delaware corporation located at 770 Lindaro Street, San Rafael, CA 94901 ("**BioMarin**"),

and

AVROBIO, Inc., a Delaware corporation having a place of business at 700 Technology Square, Suite 101, Cambridge, MA 02139 ("**AVROBIO**").

BioMarin and AVROBIO each may be referred to herein individually as a "**Party**," or collectively as the "**Parties**."

RECITALS

A. BioMarin owns and/or controls certain patents and know-how pertaining to a fusion of a portion of the insulin-like growth factor 2 protein (the "**GILT Tag**") with acid alpha-glucosidase and its use in the treatment of Pompe disease.

B. AVROBIO desires to obtain an exclusive license under such patents and know-how for the purpose of developing, manufacturing, and commercializing Licensed Products in the Field (each as defined below), and BioMarin desires to grant AVROBIO such a license on the terms and conditions set forth in this Agreement.

In consideration of the foregoing premises, the mutual promises and covenants set forth in this Agreement, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, BioMarin and AVROBIO hereby agree as follows:

AGREEMENT

1. DEFINITIONS

When used in this Agreement, the following capitalized terms will have the meanings as defined below. Unless the context indicates otherwise, the singular will include the plural and the plural will include the singular.

1.1 "Affiliate" means, with respect to a Party, any corporation, firm, partnership or other entity that directly or indirectly controls or is controlled by or is under common control with such Party, but only for so long as such control exists. As used in this definition, "control" means (with correlative meanings for the terms "controlled by" and "under common control with") that the applicable entity has the actual ability to direct and manage the business affairs of the Party, whether through ownership, directly or indirectly, of fifty percent (50%) or more of the shares of stock entitled to vote for the election of directors of the Party, in the case of a corporation, or fifty percent (50%) or more of the equity interests in the case of any other type of legal entity, status as a general partner in any partnership, or by contract or any other arrangement whereby such entity controls or has the right to control the business affairs of the Party.

1.2 “[***]” means [***].

1.3 “[***]” means [***].

1.4 “Change of Control” means with respect to AVROBIO: (a) a merger, reorganization or consolidation involving AVROBIO in which the voting securities of AVROBIO outstanding immediately prior thereto cease to represent at least fifty percent (50%) of the combined voting power of the surviving entity immediately after such merger, reorganization or consolidation; (b) a Third Party, or group of Third Parties acting in concert, acquire, directly or indirectly, other than in connection with a bona fide financing of AVROBIO, more than fifty percent (50%) of the voting equity securities or management control of AVROBIO; or (c) AVROBIO conveys, transfers, licenses (on an exclusive and worldwide basis) and/or leases all or substantially all of its assets to a Third Party.

1.5 “Commercialization” means all activities relating to the manufacture, marketing, obtaining pricing and reimbursement approvals, promotion, advertising, importing, selling, distribution and customer support of a Licensed Product in a country. The term “**Commercialize**” has a correlative meaning.

1.6 “Commercially Reasonable Efforts” means, with respect to AVROBIO’s obligations under this Agreement to Develop and Commercialize a Licensed Product, the carrying out of such obligations using good faith efforts equivalent to those efforts and resources [***].

1.7 “Controlled” means, with respect to any Know-How, Patent Right, or other intellectual property right, that the applicable Party owns or has a license under such Know-How, Patent Right, or other intellectual property right and has the ability to assign to the other Party, or grant to the other Party a license, sublicense or other right to or under, such Know-How, Patent Right or right as provided for herein without violating the terms of any agreement or other arrangements with any Third Party.

1.8 “Development” means non-clinical and clinical drug discovery, research and/or development activities that relate to (a) obtaining, maintaining or expanding Regulatory Approval(s) of Licensed Product or (b) developing the ability to manufacture clinical and commercial quantities of Licensed Product, including chemical synthesis, sequencing, toxicology, pharmacology and other discovery and pre-clinical efforts, test method development and stability testing, manufacturing process development, formulation development, delivery system development, quality assurance and quality control development, manufacturing, statistical analysis, and clinical studies. When used as a verb, **“Develop”** means to engage in Development.

1.9 “Dollars” or “**$**” means the legal tender of the U.S.

1.10 “**ERT**” means enzyme replacement therapy.

1.11 "FDA" means the United States Food and Drug Administration, or any successor agency thereto.

1.12 "Field" means Retroviridae-based gene therapy for the treatment, modification or prevention of Pompe disease (glycogen storage disease type II).

1.13 "First Commercial Sale" means, with respect to a given Licensed Product in a particular country, the first sale to a Third Party of such Licensed Product in such country, after obtaining all required Regulatory Approvals in such country. "First Commercial Sale" shall not include the supply of any unreimbursed Licensed Product for use in clinical trials or for compassionate use.

1.14 "IND" means an Investigational New Drug application filed with the FDA and sufficient to satisfy the requirements of 21 CFR 312.20, or any comparable filing with any relevant Regulatory Authority in any other jurisdiction.

1.15 "Know-How" means any non-public, documented or otherwise recorded or memorialized knowledge, experience, know-how, technology, technical information, results, trade secrets, data and all other information, including formulas and formulations, processes, techniques, unpatented inventions, discoveries, ideas, and developments, test procedures, and results, together with all documents and files embodying the foregoing, and including relevant proprietary materials. For clarity, Know-How excludes Patent Rights claiming or otherwise covering any of the foregoing.

1.16 "Licensed Know-How" means Know-How Controlled by BioMarin or its Affiliates as of the Effective Date or during the Term that is necessary to Develop and/or Commercialize Licensed Products in the Field, solely to the extent set forth on Schedule B attached hereto.

1.17 "**Licensed Patent Rights**" means: (a) any of the Patent Rights listed in Schedule A, and (b) any divisional, continuation, or continuation-in-part (but only to the extent directed to subject matter specifically described in a patent or patent application set forth on Schedule A) claiming priority to such listed patents and patent applications; any reissue, reexamination, substitution, renewal and/or extension of any of the foregoing patents and patent applications; and any foreign counterpart patent or patent application of any of the foregoing.

1.18 "**Licensed Product**" means any product the composition, formulation, delivery, manufacture, use, sale, or importation of which: (a) is claimed or otherwise covered by a Valid Claim of the Licensed Patent Rights in any country in which it is made, used or sold; or (b) uses Licensed Know-How.

1.19 "Licensed Technology" means the Licensed Patent Rights and the Licensed Know-How.

1.20 "Major European Country" means any of the following countries: [***].

1.21 "Net Sales" shall mean the amount invoiced or otherwise accrued by AVROBIO, its Affiliates or sublicensees for commercial sales of a Licensed Product to Third Party purchasers (but excluding sales to AVROBIO's sublicensees for resale) less the following deductions, to the extent applicable to such sales of the Licensed Product for:

(i) [***];

(ii) [***];

(iii) [***];

(iv) [***]; and

(v) [***].

Net Sales shall be determined in accordance with United States Generally Accepted Accounting Principles. Transfers of free Licensed Products solely for research or clinical testing purposes shall be excluded from the computation of Net Sales.

1.22 "Patent Rights" means (a) all patents and patent applications in any country or supranational jurisdiction; (b) any divisional, continuation, or continuation-in-part, reissue, reexamination, substitution, renewal and/or extension of any such patents and patent applications; and (c) any foreign counterpart patent or patent application of any of the foregoing.

1.23 "Phase I Clinical Trial" shall mean a human clinical trial of a Licensed Product that is designed to satisfy the requirements of 21 CFR 312.21(a), regardless of whether such human clinical trial also satisfies the requirements of 21 CFR. 312.21(b) or any other requirements, or a similar clinical study prescribed by the Regulatory Authorities in a country other than the United States.

1.24 "Pivotal Trial" means a clinical study in humans of the efficacy and safety of a Licensed Product that is prospectively designed to demonstrate with statistical significance that such product is effective and safe for use in a particular indication in a manner sufficient to file for Marketing Approval of such product and would satisfy the requirements of 21 CFR 312.21(c), or a similar clinical study prescribed by the Regulatory Authorities in a country other than the United States.

1.25 "Preferred Stock" means shares of the series of preferred stock issued in the Preferred Stock Financing.

1.26 "Preferred Stock Financing" means AVROBIO's first issuance and sale of shares of a newly-authorized series of preferred stock (e.g., Series B preferred stock) after the date of this Agreement to venture capital funds or other institutional investors in an equity financing with gross proceeds to the Company from sales occurring after the date of this Agreement of not less than [***].

1.27 "Preferred Stock Financing Deadline" means [***].

1.28 "Preferred Stock Issuance Price" means the lowest price per share paid by purchasers of the Preferred Stock as of the date of issuance of Preferred Stock to BioMarin (as adjusted for stock splits, combinations and the like occurring after such purchase but before the issuance of Preferred Stock to BioMarin).

1.29 "Regulatory Approvals" means, with respect to a Licensed Product, the approvals, registrations, licenses and permits of any Regulatory Authority in a country, including pricing and/or reimbursement approvals, that are necessary to be obtained in order to market and sell commercially such Licensed Product in that country.

1.30 "Regulatory Authority" means any federal, state or local regulatory agency, department, bureau or other government entity, including the FDA, which has responsibility for granting any licenses or approvals or granting pricing and/or reimbursement approvals necessary for the marketing and sale of a Licensed Product in any country.

1.31 "Regulatory Exclusivity" means market exclusivity granted by a Regulatory Authority designed to prevent the entry of generic product(s) onto the market, including without limitation new use or indication exclusivity, new formulation exclusivity, orphan drug exclusivity, pediatric exclusivity and any exclusivity applicable to biologic products, or any equivalent of the foregoing.

1.32 "[***]" means [***].

1.33 "Royalty Term" has the meaning assigned to it in Section 4.3.3.

1.34 "Term" has the meaning assigned to it in Section 8.1.

1.35 "Territory" means all countries of the world.

1.36 "Third Party" means any party other than BioMarin, AVROBIO, or their respective Affiliates.

1.37 "Valid Claim" means either (a) a claim of an issued and unexpired patent or a supplementary protection certificate, which has not been held permanently revoked, unenforceable or invalid by a decision of a court, patent office or other forum of competent jurisdiction, unappealable or unappealed within the time allowed for appeal and that is not admitted to be invalid or unenforceable through reissue, disclaimer or otherwise (i.e., only to the extent the subject matter is disclaimed or is sought to be deleted or amended through reissue), or (b) a claim of a pending patent application that has not been abandoned, finally rejected or expired without the possibility of appeal or refiling.

2. LICENSES

2.1 License Grant. Subject to the terms and conditions of this Agreement, BioMarin hereby grants to AVROBIO an exclusive, royalty-bearing license under the Licensed Patent Rights and Licensed Know-How to research, have researched, develop, have developed, make, have made, use, have used, sell, have sold, offer for sale, have offered for sale, import, have imported, export and have exported Licensed Products in the Field in the Territory, including the right to grant sublicenses through multiple tiers, subject to any limitations on sublicensing expressly set forth in this Agreement (the **"License"**). For clarity, AVROBIO shall have no license rights either outside the Field or with respect to products other than Licensed Products.

2.2 Reservation of Rights; Restrictive Covenants.

2.2.1 AVROBIO hereby covenants that it shall not, nor shall it cause or permit any Affiliate or sublicensee to, use or practice, directly or indirectly, any Licensed Technology for any purposes other than those expressly permitted by this Agreement. BioMarin retains the sole right to practice the Licensed Technology with respect to any and all purposes and areas of use outside the Field and with respect to the Development and/or Commercialization of any product or service other than Licensed Products.

2.2.2 No implied licenses are granted under this Agreement, and each Party reserves all rights to all of its technology except for the rights expressly granted herein.

2.2.3 [***].

2.3 Right to Sublicense. AVROBIO may grant sublicenses under the license set forth in Section 2.1 to its Affiliates and Third Parties, subject to the terms and conditions set forth in this Section 2.3. An existing sublicensee in good standing may grant further sublicenses, also subject to such terms and conditions.

2.3.1 Each sublicense agreement shall be consistent with and subject to the terms and conditions of this Agreement. AVROBIO shall remain responsible for the performance of all sublicensees under any such sublicenses as if such performance were carried out by AVROBIO itself, including, without limitation, the payment of any royalties or other payments provided for hereunder.

2.3.2 Each sublicense agreement shall include (a) diligence obligations consistent with efforts that will allow AVROBIO to meet relevant obligations set forth in Section 3 below; (b) a direct indemnity by the sublicensee in favor of BioMarin similar in scope to that set forth in Section 9; and (c) a provision making BioMarin an express third party beneficiary of such sublicense agreement with respect to such indemnification provisions.

2.3.3 AVROBIO will provide BioMarin with a copy of each sublicense agreement within [***] of execution of such agreement, [***].

2.4 Technology Transfer. BioMarin will provide to AVROBIO, [***], copies of the Licensed Know-How set forth in Schedule B, which information shall be provided to AVROBIO within [***] of the Effective Date to the extent practicable, and in any event within [***] after the Effective Date. In addition, [***]. For purposes hereof, MAA means (a) a Biologics License Application as defined in the United States Federal Food, Drug and Cosmetics Act, as amended, and the regulations promulgated thereunder, or (b) a Marketing Authorization Application in the European Union.

2.5 Other Technology. AVROBIO shall be solely responsible for obtaining, at its sole expense, any agreements with Third Parties required in order for AVROBIO to conduct the Development and Commercialization of Licensed Products in the Field in the Territory. AVROBIO's right to credit any costs and expenses that it incurs under or as a result of such Third Party agreements against amounts due under this Agreement shall be solely as set forth in Section 4.3.2.

3. DEVELOPMENT AND COMMERCIALIZATION OF LICENSED PRODUCTS

3.1 Responsibilities. Subject to the terms and conditions of this Agreement (including without limitation this Section 3), AVROBIO (and/or its Affiliates and sublicensees) will be solely responsible, at AVROBIO's expense, for the Development and Commercialization of Licensed Products in the Field in the Territory, using Commercially Reasonable Efforts. AVROBIO will conduct, and will cause its Affiliates and sublicensees to conduct, such activities in a good scientific manner and in compliance in all material respects with all applicable laws.

3.2 Communication. Each Party will appoint one of its employees to serve as a liaison and alliance manager hereunder (**"Alliance Manager"**) with responsibility for overseeing communications between the Parties relevant to this Agreement, including without limitation communications regarding: (a) the transfer of the Licensed Know-How to AVROBIO as contemplated in Section 2.4 above, (b) patent matters, and (c) AVROBIO's diligence obligations. The initial Alliance Manager for AVROBIO shall be [***] and for BioMarin shall be [***]. Each Party may replace its Alliance Manager at any time by notice in writing to the other Party.

3.3 Diligence. AVROBIO will use Commercially Reasonable Efforts to Develop and Commercialize one or more Licensed Products in the United States and in the Major European Countries. In addition, and without limiting the generality of the foregoing, AVROBIO shall initiate an IND-enabling pharmacology/toxicology study of a Licensed Product within [***] of the Effective Date. In the event that BioMarin believes AVROBIO is in material breach of its obligation to use Commercially Reasonable Efforts under this Section 3.3, then BioMarin may so notify AVROBIO in writing, which notice shall provide available details regarding the basis for its belief and specifying that such notice (a "**Diligence Breach Notice**") is being provided by BioMarin pursuant to this Section 3.3. If a Diligence Breach Notice is provided to AVROBIO, AVROBIO may, within a further period of [***] after receipt of such notice, provide a written report to BioMarin to justify why AVROBIO believes it is not in such material breach of such diligence obligation. If no such report is provided by AVROBIO by the end of such time period, BioMarin shall be permitted to terminate this Agreement pursuant to Section 8.2. If AVROBIO provides a response, the Parties shall then conduct an initial meeting within [***] after delivery of such a written report from AVROBIO to discuss in good faith the concerns raised by BioMarin and shall conduct such additional meetings as are reasonably necessary to reach agreement as to whether or not AVROBIO is in material breach of its obligations under this Section 3.3 for an additional [***] after such initial meeting. If after such [***] period following the initial meeting, the Parties cannot reach agreement then, upon request of either Party, the matter shall be referred to the dispute resolution procedure outlined under Section 11.3, which procedure shall be required to: (a) determine whether there was, in fact, a material breach by AVROBIO of its diligence obligation, and (b) if it is determined that there was an uncured material breach, specify what additional efforts AVROBIO must undertake to cure such breach, and the time period during which such efforts must be commenced and completed (which time period shall be commercially reasonable). If such procedure determines that there was a material

breach of the diligence obligation hereunder, and AVROBIO does not commence or complete the cure efforts specified by the arbitration result (in response to the clause (b) requirement above) by the required relevant dates, then BioMarin may terminate the Agreement pursuant to Section 8.2. All efforts of AVROBIO's Affiliates, Third Party contractors and sublicensees will be considered efforts of AVROBIO for the purpose of determining AVROBIO's compliance with its obligations under this Section 3.3.

3.4 Reports. AVROBIO will keep BioMarin reasonably informed regarding the progress and results of AVROBIO's Development and Commercialization activities and those of its Affiliates, sublicensees, and Third Party contractors as set forth below. [***] each year, no later than [***], AVROBIO shall provide BioMarin with a written report that summarizes, in reasonable detail, the Development and Commercialization activities performed by AVROBIO and its Affiliates, sublicensees, and Third Party contractors with respect to Licensed Products during the preceding [***] period, as well as AVROBIO's expected future Development and Commercialization timeline for Licensed Products.

4. FINANCIAL TERMS

4.1 Initial License Fee. As initial consideration for the grant of rights set forth herein, AVROBIO will (a) pay to BioMarin a non-creditable, non-refundable initial license fee of five hundred thousand Dollars ($500,000), payable within [***] of the Effective Date, and (b) on or before the Preferred Stock Financing Deadline, issue to BioMarin that number of shares of Preferred Stock equal to five hundred thousand Dollars ($500,000) divided by the Preferred Stock Issuance Price, rounded to the nearest whole share, for no additional cash but otherwise on the same terms and conditions at which such shares of Preferred Stock were sold by AVROBIO to the other investor(s) in the Preferred Stock Financing. As a condition to its receipt of any Preferred Stock, BioMarin will enter into AVROBIO's investor rights agreement, voting agreement, and right of first refusal and co-sale agreement, or other similar agreements, all on the same terms and conditions as the other investor(s) in the Preferred Stock Financing. [***]. Notwithstanding clause (b) above, in the event AVROBIO completes a Change of Control prior to the closing of the Preferred Stock Financing, then AVROBIO will pay to BioMarin a non-creditable, non-refundable payment of [***], in cash, payable within [***] of the date on which such Change of Control becomes effective and will not have the right to issue shares of Preferred Stock to BioMarin as set forth in clause (b) above. Unless a Change of Control has occurred prior to such time. AVROBIO shall notify BioMarin of the completion of the Preferred Stock Financing within [***] after such completion and shall notify BioMarin of any failure to complete the Preferred Stock Financing no later than [***] following the Preferred Stock Financing Deadline. In the event AVROBIO does not complete the Preferred Stock Financing by the Preferred Stock Financing Deadline and has not completed a Change of Control, then AVROBIO shall pay to BioMarin a non-creditable, non-refundable license fee of [***] within [***] of the Preferred Stock Financing Deadline in lieu of the obligation to issue Preferred Stock set forth in clause (b) above.

4.2 Milestone Payments.

4.2.1 Development Milestones. AVROBIO will pay to BioMarin the following non-creditable, non-refundable milestone payments within [***] following the first achievement of the corresponding events described in the table below by the first Licensed Product being Developed by or on behalf of AVROBIO, its Affiliates or sublicensees to achieve such event. For clarity, each Development Milestone payment below shall be made only once, upon the first attainment of the applicable milestone event by any Licensed Product being Developed by or on behalf of AVROBIO, its Affiliates or sublicensees.

MILESTONE EVENT	MILESTONE PAYMENT
1. [***]	$[***]
2. [***]	$[***]
3. [***]	$[***]
4. [***]	$[***]

[***].

4.3 Royalties.

4.3.1 **Royalty Rates**. During the applicable Royalty Term, AVROBIO will pay to BioMarin a royalty of [***] on Net Sales by AVROBIO, its Affiliates and sublicensees of those Licensed Products the composition, formulation, delivery, manufacture, use, sale, or importation of which is claimed or otherwise covered by a Valid Claim of the Licensed Patent Rights in at least one country in which it is made, used or sold.

4.3.2 [***]

4.3.3 **Royalty Term**. AVROBIO's royalty payment obligations under this Section 4.3 will expire, with respect to a particular Licensed Product sold in a given country (on a Licensed Product-by-Licensed Product and country-by-country basis), upon the expiration of the period (the "**Royalty Term**" for such Licensed Product in such country) commencing upon First Commercial Sale of the applicable Licensed Product in such country and ending upon the latest of: (a) expiration of the last-to-expire Valid Claim of a Licensed Patent Right in such country; (b) the date ten (10) years after the First Commercial Sale of such Licensed Product by AVROBIO, its Affiliates or sublicensees in such country; and (c) expiration of any applicable Regulatory Exclusivity in such country granted by a Regulatory Authority with respect to the Licensed Product.

4.4 Royalty Reports; Payment. Following the First Commercial Sale of any Licensed Product for which royalties are due pursuant to Section 4.3, and continuing for so long as royalties are due hereunder, within [***] after the end of each [***], AVROBIO shall provide a royalty-report showing, on a Licensed Product-by-Licensed Product and country-by-country basis:

(a) gross sales of Licensed Products sold by AVROBIO, its Affiliates and sublicensees during such [***] reporting period (on a Licensed Product by Licensed Product and country by country basis);

(b) an itemized calculation of the Net Sales (showing all deductions taken pursuant to Section 1.20) of each Licensed Product sold by AVROBIO, its Affiliates and sublicensees during such [***] reporting period, along with cumulative Net Sales for the then-current calendar year;

(c) the royalties payable in United States Dollars which shall have accrued hereunder with respect to such Net Sales;

(d) Withholding Taxes (as defined in Section 4.9), if any, required by applicable law to be deducted with respect to such royalties; and

(e) the rate of exchange with supporting calculations, determined in accordance with Section 4.5, used by AVROBIO in determining the amount of United States Dollars payable hereunder.

AVROBIO shall pay to BioMarin the royalties for each [***] at the time of submission of AVROBIO's royalty report. If no royalty is due for any royalty period hereunder following commencement of the reporting obligation, AVROBIO shall so report.

4.5 Currency Exchange. In the case of Net Sales outside the United States, the rate of exchange to be used in computing the amount of currency equivalent in United States Dollars shall be the closing exchange rate reported in *The Wall Street Journal* (U.S., Eastern Edition) on the last business day of the applicable [***] for which the payment is made.

4.6 Records; Audit, Records and Audits. AVROBIO shall keep, and shall require its Affiliates and (sub)licensees to keep (all in accordance with U.S. generally accepted accounting principles, consistently applied), complete and accurate records in sufficient detail to properly reflect Net Sales and to enable any milestones payable hereunder to be determined. Upon the written request of BioMarin and not more than once in each calendar year, AVROBIO and its Affiliates shall permit an independent certified public accounting firm of nationally recognized standing selected by BioMarin and reasonably acceptable to AVROBIO, at BioMarin's expense, to have access during normal business hours to such records of AVROBIO and/or its Affiliates as may be reasonably necessary to verify the accuracy of the payments hereunder for any calendar year ending not more than [***] prior to the date of such request. These rights with respect to any calendar year shall terminate [***] after the end of any such calendar year. BioMarin shall provide AVROBIO with a copy of the accounting firm's written report within [***] of completion of such report. If such accounting firm correctly concludes that an underpayment was made, then AVROBIO shall pay the amount due within [***] of the date BioMarin delivers to AVROBIO such accounting firm's written report so correctly concluding. BioMarin shall bear the full cost of such audit, unless such audit correctly discloses that the additional payment payable by AVROBIO for the audited period is more than [***] percent ([***]%) of the amount otherwise paid for that audited period, in which case AVROBIO shall pay the fees and expenses charged by the accounting firm. AVROBIO shall include in each relevant license granted by it a provision requiring any (sub)licensee to maintain records of sales of Licensed Products made pursuant to such license, and to grant access to such records by AVROBIO's independent accountant to the same extent and under the same obligations as required of AVROBIO under this Agreement. AVROBIO shall advise BioMarin in advance of each audit of any such (sub)licensee with respect to Licensed Product sales. AVROBIO will provide BioMarin with a summary of the results received from the audit and, if BioMarin so requests, a copy of the audit report, with respect to relevant Licensed Product sales.

4.7 Confidentiality. Each Party will treat all information subject to review under Section 4.6 in accordance with the provisions of Section 7 and will cause its accounting firm and the independent expert to enter into a reasonably acceptable confidentiality agreement with the audited Party obligating such entity to maintain all such financial information in confidence pursuant to such confidentiality agreement.

4.8 Payment Terms; Interest.

4.8.1 Payments under this Agreement shall be made in U.S. Dollars by wire transfer of immediately available funds to an account at a commercial bank designated by BioMarin, such designation in writing to be provided to AVROBIO at least [***] before payment is due. Any payments due under this Agreement shall be due on such date as specified in the Agreement or, in the event that such date is not a business day, the next succeeding business day. Any payments for reimbursement of patent expenses that are based on invoices shall be made within [***] from AVROBIO's receipt of such invoice.

4.8.2 If AVROBIO does not make a payment that is owed under the terms of this Agreement by the date when due, then AVROBIO shall be obligated to pay computed simple interest, the interest period commencing from such date and ending on the date that payment of the amount owed is actually made, at an interest rate per annum equal to [***] percent ([***]%), or the highest rate allowed by law, whichever is lower. The interest calculation shall be based on the Actual/360 computation method. Such interest shall be due and payable on the tender of the underlying principal payment.

4.9 Taxes. BioMarin will be responsible for any income or other taxes owed by BioMarin and required by applicable law to be withheld or deducted from any of the royalty and other payments made by or on behalf of AVROBIO to BioMarin hereunder ("**Withholding Taxes**"), and AVROBIO may deduct from any amounts that AVROBIO is required to pay hereunder to BioMarin an amount equal to any such Withholding Taxes required by AVROBIO to be withheld and paid to the proper tax authority. BioMarin will provide AVROBIO any information available to BioMarin that is necessary to determine the Withholding Taxes. Such Withholding Taxes will be paid to the proper taxing authority for BioMarin's account and evidence of such payment will be secured and sent to BioMarin within [***] of such payment. The Parties will use reasonable efforts to do such lawful acts and sign such lawful deeds and documents as either Party may reasonably request from the other Party to enable BioMarin and AVROBIO or its Affiliates or sublicensees to take advantage of any applicable legal provision or any double taxation treaties with the object of paying the sums due to BioMarin hereunder without, or to minimize the amount of, such withholding or deduction of any Withholding Taxes.

5. INTELLECTUAL PROPERTY RIGHTS

5.1 Prosecution of Licensed Patent Rights.

5.1.1 In accordance with this Section 5.1.1, unless the Parties otherwise agree in writing for a given Licensed Patent Right, BioMarin will have lead responsibility for the preparation, filing, prosecution, defense and maintenance ("**Prosecution"**) in the Territory of the Licensed Patent Rights. BioMarin shall be responsible for all costs and expenses with respect to such activities, except to the extent that any such activities are undertaken after the Effective Date at the express request of AVROBIO and in cooperation with AVROBIO as further provided in Section 5.1.2 below. BioMarin will perform such activities either itself or through patent counsel of its choice. BioMarin will provide AVROBIO with copies of all official correspondence received from patent offices with respect to any claims of Licensed Patent Rights submitted pursuant to Section 5.1.2, and with any proposed substantive responses thereto sufficiently in advance for AVROBIO to provide comments and suggestions on such proposed responses, which comments and suggestions shall be considered by BioMarin in good faith. At AVROBIO's request, BioMarin will provide AVROBIO with an update of the filing, prosecution and maintenance status for each Licensed Patent Right; provided that BioMarin shall not be obligated to provide such updates more than [***] times per year. In the event that BioMarin elects not to pursue or continue the Prosecution of any Licensed Patent Right in any country, BioMarin shall provide AVROBIO with notice of this decision at least [***] prior to any pending lapse or abandonment thereof and provide AVROBIO with an opportunity to assume responsibility for such Prosecution, at AVROBIO's sole expense. In the event that AVROBIO elects in writing to assume responsibility for such Prosecution, AVROBIO shall have the right, at AVROBIO's sole expense, to transfer the responsibility for such Prosecution of such patent applications and patents to patent counsel selected by it, and BioMarin shall cooperate with AVROBIO as reasonably requested to facilitate transfer of the control of such Prosecution to AVROBIO. For clarity, all filings with respect to Licensed Patent Rights shall at all times continue to be pursued in the name of BioMarin or its designee.

5.1.2 Promptly following the Effective Date, [***].

5.2 Enforcement.

5.2.1 **Initiation**. If either Party learns of any infringement or threatened infringement by a Third Party of any Licensed Patent Right in the Field, such Party shall promptly notify the other Party and shall provide such other Party with available evidence of such infringement. AVROBIO shall have the first right, but not the obligation, at its sole expense, to bring suit or other appropriate legal action against any actual or suspected infringement, in the Field, of any Licensed Patent Rights impacting the Development or Commercialization of Licensed Products in the Field, in the Territory. BioMarin shall have the right to participate and be represented in any such suit by its own counsel at its own expense. No settlement of any such action or defense which restricts the scope, or adversely affects the enforceability, of any such Licensed Patent Right may be entered into by AVROBIO without the prior written consent of BioMarin. If AVROBIO does not take such action within [***] after written notice from BioMarin of such infringement, then on written request by BioMarin, and with AVROBIO's prior written consent (not to be unreasonably withheld) BioMarin shall have the right but not the obligation, at its own expense, to bring suit or other appropriate legal action against such infringement. BioMarin shall have the sole right but not the obligation, at its own expense, to bring suit or other appropriate legal action against infringement of the Licensed Patents outside the Field. Notwithstanding the foregoing, with respect to the Licensed Patent Rights listed in Part 2 of Schedule A, Section 5.2.2 shall apply.

5.2.2 **Part 2 Patents.** BioMarin shall have the first right, but not the obligation, at its sole expense, to bring suit or other appropriate legal action against any actual or suspected infringement, in the Field, of any Licensed Patent Rights included in Part 2 of Schedule A impacting the Development or Commercialization of Licensed Products in the Field, in the Territory. AVROBIO shall have the right to participate and be represented in any such suit by its own counsel at its own expense. No settlement of any such action or defense which could reasonably be expected to have a material adverse effect on AVROBIO's exclusive rights under this Agreement regarding the Development or Commercialization of Licensed Products in the Field in the Territory may be entered into by BioMarin without the prior written consent of AVROBIO, which consent shall not be unreasonably withheld, conditioned or delayed. If BioMarin does not take such action within [***] after written notice from AVROBIO of such infringement, then on written request by AVROBIO, and with BioMarin's prior written consent (not to be unreasonably withheld) AVROBIO shall have the right but not the obligation, at its own expense, to bring suit or other appropriate legal action against such infringement; provided that BioMarin will have the right to participate in and control any such litigation with respect to invalidity defenses and counterclaims at AVROBIO's expense, and to otherwise participate and be represented in any such suit, using its own counsel at BioMarin's expense, provided that BioMarin shall use all reasonable efforts to control the expenses to be borne by AVROBIO.

5.2.3 **Cooperation**. Each Party shall, at the other Party's expense, execute all papers and perform such other acts as may be reasonably required to bring and/or maintain any infringement suit brought by the other Party in accordance with Section 5.2.1 or Section 5.2.2 above (including joining as a party to such actions or proceedings if required by applicable law). In the event BioMarin is joined as a party to an action initiated by AVROBIO pursuant to Section 5.2, AVROBIO shall indemnify and secure BioMarin as to any costs (including internal costs), damages and expenses to the extent incurred as a direct result of BioMarin's joinder. In addition, the Parties shall cooperate with each other in obtaining patent term restoration or supplemental protection certificates or their equivalents in any country where applicable to Licensed Products. In the event that elections with respect to obtaining such patent term restoration, supplemental protection certificates or their equivalents are to be made, the Parties shall agree upon such elections.

5.2.4 **Recovery**. Any amount recovered, whether by judgment or settlement, shall first be applied to reimburse the costs and expenses (including attorneys' fees) of the Party bringing suit, then to the costs and expenses (including attorneys' fees), if any, of the other Party. Any net amounts of recovery(remaining after payment of costs and expenses as above shall be allocated [***].

5.3 Defense of Infringement Claims. If the manufacture, sale or use of a Licensed Product pursuant to this Agreement results in, or may result in, any claim, suit, or proceeding by a Third Party alleging patent infringement by AVROBIO (or its Affiliates or sublicensees) in the Field in the Territory, AVROBIO will promptly notify BioMarin thereof in writing, and AVROBIO shall indemnify BioMarin with respect to any such claims as required in Section 9. AVROBIO or its Affiliate or sublicensee will have the exclusive right to defend and control the defense of any such claim, suit, action or proceeding at its own expense, using counsel of its own choice, and may settle any such claim, suit, action or proceeding at its sole discretion; *provided*, that if any such settlement would admit or concede that any material aspect of the Licensed

Patent Rights are invalid or unenforceable, or would shorten the life of any of the Licensed Patent Rights or narrow their scope, or require BioMarin to pay any amounts, the aspects of such settlement directly involving such admission or concession or payment shall require the prior written consent of BioMarin. AVROBIO will keep BioMarin reasonably informed of all material developments in connection with any such claim, suit, or proceeding.

5.4 Patent Marking. AVROBIO shall, and shall require its Affiliates and sublicensees to, mark Licensed Products sold by it hereunder with appropriate patent numbers or indicia to the extent permitted by applicable law and regulations, in those countries in which such markings or such notices impact recoveries of damages or equitable remedies available with respect to infringements of Patent Rights.

6. REPRESENTATION AND WARRANTIES; COVENANTS

6.1 BioMarin Warranties. BioMarin hereby warrants and represents to AVROBIO, as of the Effective Date, that: (i) BioMarin owns or otherwise Controls the Licensed Technology and has the right to grant the licenses under the Licensed Technology as set forth in this Agreement; (ii) BioMarin has not entered into any agreement, arrangement or understanding regarding the use of the Licensed Technology in the Field in the Territory that would prevent BioMarin from granting the license to AVROBIO as set forth in Section 2.1 of this Agreement; (iii) during the Term of this Agreement, BioMarin shall not grant a license under the Licensed Technology to any Third Party in the Field in the Territory; (iv) none of the Licensed Technology has been misappropriated from any Third Party; and [***].

6.2 Reciprocal Representations and Warranties. Each Party represents and warrants to the other Party that: (i) this Agreement is a legal and valid obligation binding upon its execution and enforceable against it in accordance with its terms and conditions; and (ii) the execution, delivery and performance of this Agreement by such Party has been duly authorized by all necessary corporate action, and (iii) the person executing this Agreement on behalf of such Party has been duly authorized to do so by all requisite corporate actions.

6.3 DISCLAIMER OF WARRANTY. EXCEPT FOR THE EXPRESS WARRANTIES SET FORTH HEREIN, NEITHER PARTY MAKES ANY REPRESENTATIONS NOR GRANTS ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, EITHER IN FACT OR BY OPERATION OF LAW, BY STATUTE OR OTHERWISE, AND BIOMARIN AND AVROBIO EACH SPECIFICALLY DISCLAIMS ANY OTHER WARRANTIES, WHETHER WRITTEN OR ORAL, OR EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF QUALITY OR MERCHANTABILITY, OR ANY WARRANTY AS TO THE VALIDITY OR ENFORCEABILITY OF ANY PATENTS OR THE NONINFRINGEMENT OF ANY INTELLECTUAL PROPERTY RIGHTS OF THIRD PARTIES.

7. CONFIDENTIALITY

7.1 Definition. During the Term, a Party (the "**Disclosing Party**", with respect to information disclosed by such Party) may disclose or otherwise communicate to the other Party (the "**Receiving Party**", with respect to information disclosed to such Party by the other Party)

its information in connection with this Agreement or the performance of its obligations hereunder (the "**Confidential Information**" of the disclosing Party), which may include scientific and manufacturing information and plans, marketing and business plans, and financial and personnel matters relating to a Party or its present or future products, sales, suppliers, customers, employees, investors or business. Without limiting the foregoing, "**Confidential Information**" of a Party is hereby deemed to include any information disclosed by such Party to the other Party pursuant to that certain confidentiality agreement between the Parties dated as of March 1, 2017 (the "**Prior CDA**"). For clarity, the Licensed Technology is the Confidential Information of BioMarin, subject to the exceptions set forth in Section 7.2.

7.2 Exclusions. Notwithstanding the foregoing, information disclosed by a Disclosing Party will not be deemed Confidential Information with respect to the Receiving Party for purposes of this Agreement if such information:

(a) was already known to the Receiving Party or its Affiliates, as evidenced by their written records, other than under an obligation of confidentiality or non-use, at the time of disclosure to the Receiving Party;

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

(c) became generally available or otherwise became part of the public domain after its disclosure to the Receiving Party, through no fault of or breach of its obligations under this Section 9 or the Prior CDA (as defined above) by the Receiving Party;

(d) was disclosed to the Receiving Party, other than under an obligation of confidentiality or non-use, by a Third Party who had no obligation to the Party that controls such information not to disclose such information to others and has the lawful right to disclose it; or

(e) was independently discovered or developed by the Receiving Party or its Affiliate, as evidenced by written records, without the use of Confidential Information belonging to the Disclosing Party.

7.3 Disclosure and Use Restriction. Except as expressly otherwise provided herein, each Party agrees that, during the Term and for [***] thereafter, such Party (as the Receiving Party with respect to Confidential Information of the other Party) and its Affiliates and sublicensees will keep completely confidential, and will not publish or otherwise disclose and will not use for any purpose except for the purposes expressly contemplated by this Agreement, any Confidential Information of the Disclosing Party.

7.4 Authorized Disclosure. A Receiving Party may disclose specific Confidential Information of the Disclosing Party to the extent that such disclosure is:

7.4.1 required by a valid order of a court of competent jurisdiction or other governmental or regulatory body of competent jurisdiction; *provided*, that such Receiving Party will first have given reasonable prior notice of such disclosure requirement to the Disclosing Party and given the Disclosing Party a reasonable opportunity to quash such order and/or to obtain a protective or order limiting such disclosure and/or requiring that the Confidential Information and documents that are the subject of such order be held in confidence by such court or governmental or regulatory body and/or, if disclosed, be used only for the purposes for which the order was issued; and *provided, further*, that if the disclosure requirement is not quashed, the Confidential Information disclosed in response to such court or governmental order will be limited to that information that is legally required to be disclosed in response to such court or governmental order, taking into account any protective or other similar order limiting such disclosure obligation;

7.4.2 required by law; *provided*, that the Disclosing Party will provide the Receiving Party with notice of such disclosure in advance thereof to the extent practicable and the disclosure will be limited to that information that is legally required to be disclosed in response to such court or governmental order;

7.4.3 made by the Receiving Party to Regulatory Authorities as required in connection with any regulatory filing or application made in accordance with the terms of this Agreement: *provided*, that reasonable measures will be taken to assure confidential treatment of such information;

7.4.4 made by the Receiving Party as reasonably required in connection with the performance of this Agreement, to Affiliates, employees, consultants, representatives or agents, each of whom prior to disclosure must be bound by obligations of confidentiality and non-use at least equivalent in scope to those set forth in this Section 7;

7.4.5 made by the Receiving Party to existing or potential acquirers or merger candidates; potential sublicensees or collaborators (to the extent contemplated hereunder); investment bankers; existing or potential investors, venture capital firms or other financial institutions or investors for purposes of obtaining financing; or Affiliates, each of whom prior to disclosure must be bound by obligations of confidentiality and non-use at least equivalent in scope to those set forth in this Section 7.4;

7.4.6 made by the Receiving Party with the prior written consent of the Disclosing Party.

7.5 Use of Name. Neither Party may make public use of the other Party's name except (a) in connection with the activities contemplated hereby as permitted in this Section 7, (b) as required by applicable law, subject to this Section 7, and (c) otherwise as agreed in writing by such other Party.

7.6 Terms of Agreement to be Maintained in Confidence. The Parties agree that the terms of this Agreement are confidential and will not be disclosed by either Party to any Third Party (except to a Party's professional advisor, in accordance with Section 7.4.4) without prior written permission of the other Party; *provided*, that either Party may make any filings of this Agreement required by law or regulation in any country so long as such Party uses its reasonable efforts to obtain confidential treatment for portions of this Agreement as available, consults with the other Party, and permits the other Party to participate, to the extent practicable, in seeking a protective order or other confidential treatment; and *provided further*, that a Party may publicly disclose, without regard to the preceding requirements of this Section 7.6, information that was previously disclosed in compliance with such requirements; and *provided further,* that a Party may disclose such terms in confidence as provided in Section 7.4.5.

7.7 Press Release. Neither Party shall issue any press release or other public announcement relating to the existence of this Agreement or the terms hereof without obtaining the other Party's written approval. For clarity, subject to AVROBIO's compliance with its obligations regarding Confidential Information of BioMarin hereunder and with Sections 7.5 and 7.6, and as long as specific reference to [***] is not made unless and until use of [***] by AVROBIO has been disclosed in scientific publications or presentations made by AVROBIO in the normal course of business, nothing in this Agreement shall be deemed to prohibit AVROBIO from making customary public disclosures regarding the Licensed Product development program in the Field to be conducted by AVROBIO hereunder. For further clarity, AVROBIO may make disclosures regarding this Agreement to its current and prospective investors as permitted under Section 7.4.5 and as permitted in Section 7.5.

8. TERM AND TERMINATION

8.1 Term. The term of this Agreement will commence as of the Effective Date and, will expire upon the expiration of the last Royalty Term for all Licensed Products in all countries in the Territory, or will terminate if the Agreement is earlier terminated in accordance with this Section 8 (such period, the "**Term**").

8.2 Termination for Material Breach.

8.2.1 Any material failure by a Party (the "**Breaching Party**") to comply with its material obligations contained in this Agreement (such failure a "**Material Breach**") will entitle the other Party ("**Non-Breaching Party**") to give to the Breaching Party written notice of the Material Breach, which notice shall specify in detail the nature of the breach and shall, require the Breaching Party to make good or otherwise cure such Material Breach.

8.2.2 If such Material Breach is not cured within [***] ([***] for Material Breach of any payment obligation or obligation to issue Preferred Stock) after the receipt of notice pursuant to Section 8.2.1 above, the Non-Breaching Party will be entitled to terminate this Agreement on written notice to the Breaching Party and without prejudice to any of its other rights conferred on it by this Agreement and other remedies available under applicable law.

8.3 Termination at Will.

8.3.1 AVROBIO may terminate this Agreement at will upon [***] prior written notice to BioMarin.

8.3.2 BioMarin may terminate this Agreement in its entirety upon written notice to AVROBIO in the event of (i) any challenge or opposition to the validity, patentability, enforceability, scope and/or non-infringement of any of the Licensed Patent Rights, or any actions otherwise opposing any of such Licensed Patent Rights, if brought by AVROBIO, its Affiliates or sublicensees anywhere in the Territory, or (ii) any assistance with respect to any of the foregoing actions which any of AVROBIO, its Affiliates or sublicensees knowingly provides to a Third Party anywhere in the Territory (except as required under a court order or subpoena).

8.3.3 BioMarin may terminate this Agreement at will immediately, by providing written notice to AVROBIO upon the 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 or against AVROBIO; provided, however, that in the case of any involuntary bankruptcy proceeding such right to terminate shall only become effective if AVROBIO consents to the involuntary bankruptcy or such proceeding is not dismissed within [***] after the filing thereof.

8.4 Consequences of Expiration and Termination.

8.4.1 **Expiration**. Upon expiration of the Royalty Term in a particular country for a given Licensed Product, AVROBIO's license under Section 2.1 with respect to such Licensed Product in the Field in such country will become irrevocable, perpetual and fully-paid.

8.4.2 **Early Termination**. Upon termination of this Agreement by a Party for Material Breach pursuant to Section 8.2, or by a Party pursuant to Section 8.3, the following provisions will apply:

(a) All rights and licenses granted by BioMarin to AVROBIO under this Agreement will terminate immediately.

(b) AVROBIO and its Affiliates shall discontinue making any representations regarding its or their status as a licensee(s) of BioMarin and with respect to Licensed Products, and shall cause any sublicensees (except as set forth in clause (c) below) to do the same. AVROBIO and its Affiliates shall cease conducting any activities with respect to the Development and Commercialization of the Licensed Products, and shall cause any sublicensees to do the same.

(c) Subject to BioMarin's written consent, such consent to not be unreasonably withheld, a sublicense granted by AVROBIO or any of its Affiliates to a sublicensee shall survive termination of this Agreement, provided that such subicensee agrees in writing within [***] of termination of this Agreement to fully perform what would otherwise be AVROBIO's obligations to BioMarin under this Agreement, including without limitation an agreement to cure any then-existing breaches of this Agreement by AVROBIO.

8.4.3 Upon termination or expiration of the Agreement in whole or in part, upon the request of the Disclosing Party, the Receiving Party shall promptly return to the Disclosing Party or destroy the Disclosing Party's Confidential Information, including all copies thereof, except to the extent that retention of such Confidential Information is reasonably necessary for the Receiving Party to exploit any continuing rights it may have (including, without limitation, the right to exploit any fully paid-up license pursuant to Section 8.4.1 in the event of an expiration of the Agreement in whole or in part) and/or to fulfill its obligations contemplated herein, including its obligations of non-disclosure and non-use hereunder. The return and/or destruction of such Confidential Information as provided above shall not relieve the Receiving

Party of its obligations under the Agreement. The provisions of this section shall not apply to copies of electronically exchanged Confidential Information made as a matter of routine information technology backup and maintained in a secure manner, or to Confidential Information or copies thereof which must be stored by the Receiving Party according to provisions of applicable law; provided that such Confidential Information shall remain subject to the terms of Section 7.

8.4.4 **Survival**. Expiration or termination of this Agreement will not relieve the Parties of any obligation accruing prior to such expiration or termination. The provisions of Sections [***] will survive any termination or expiration of this Agreement.

9. INDEMNIFICATION AND INSURANCE

9.1 Indemnification by BioMarin. BioMarin will indemnify AVROBIO, its Affiliates, and their respective directors, officers, employees and agents (**"AVROBIO Indemnitees"**), and defend and hold each of them harmless, from and against any and all liabilities, expenses and/or losses (including without limitation attorneys' fees, court costs, witness fees, damages, judgments, fines and amounts paid in settlement) ("**Losses**") based on or suffered in connection with any Third Party suits, claims, actions, and demands ("**Claims"**) against any such AVROBIO Indemnitee to the extent arising from or occurring as a result of or in connection with (i) any material breach by BioMarin of its representations and warranties in Section [***] of this Agreement, or (ii) the gross negligence or willful misconduct of BioMarin or its Affiliates; except, to the extent that such Losses arise out of or result from the gross negligence or willful misconduct of any AVROBIO lndemnitee, or a breach by AVROBIO of any provision of this Agreement.

9.2 **Indemnification by AVROBIO**. AVROBIO will indemnify BioMarin, its Affiliates, and their respective directors, officers, employees, and agents ("**BioMarin Indemnitees**"), and defend and hold each of them harmless, from and against any and all Losses based on or suffered in connection with any Claims against any such BioMarin Indemnitee to the extent arising from or occurring as a result of or in connection with: (i) [***] (ii) any breach by AVROBIO, its Affiliates or sublicensees (including each of their respective directors, officers, employees, independent contractors, and agents) of this Agreement or of applicable law, (iii) the negligence or willful misconduct of AVROBIO, its Affiliates or sublicensees (including each of their respective directors, officers, employees, independent contractors, and agents); (iv) [***] or (v) criminal investigations of, defense of criminal charges against, and criminal penalties levied on, AVROBIO or its Affiliates or sublicensees, or their respective directors, employees and agents; except, in each case, to the extent that such Losses arise out of or result from the gross negligence or willful misconduct of any BioMarin Indemnitee, or a breach by BioMarin of any provision of this Agreement.

9.3 Indemnification Procedure.

9.3.1 **Notice of Claim**. Each of AVROBIO and BioMarin, as applicable (the "**Indemnitee**") will give the other Party (the "**Indemnifying Party**") prompt written notice (an "**Indemnification Claim Notice**") of any Claims or discovery of fact upon which an Indemnitee intends to base a request for indemnification under Section 9.1 or 9.2, as applicable; *provided, however,* that the failure to give such prompt written notice will not relieve the Indemnifying Party of its indemnification obligation under this Agreement except and only to the extent that the Indemnifying Party is actually prejudiced as a result of such failure. In no event will the Indemnifying Party be liable for any Losses that result from any delay in providing such notice. Each Indemnification Claim Notice must contain a description of the Claim and the nature and amount of such Loss (but only to the extent that the nature and amount of such Loss are known at such time). The Indemnitee will furnish promptly to the Indemnifying Party copies of all papers and official documents received by it or any of its fellow Indemnitees, as applicable, in respect of any Losses.

9.3.2 **Control of Defense**. Within [***] after the Indemnifying Party's receipt of an Indemnification Claim Notice pursuant to Section 9.3.1, the Indemnifying Party shall assume the defense of the Claim(s) referenced in such notice and provide written confirmation to

the other Party and any other of its fellow Indemnitees. Upon assuming the defense of a Claim, the Indemnifying Party shall appoint lead counsel in the defense of the Claim; provided that such lead counsel shall be reasonably acceptable to the other Party. Upon the Indemnifying Party's assumption of the defense of a Claim, the Indemnitees will immediately deliver to the Indemnifying Party all original notices and documents (including court papers) received by such Indemnitees in connection with the Claim. The Indemnifying Party will keep the other Party regularly informed with respect to the status of its defense of any such Claim, and will respond promptly to the other Party's questions with respect to such (including, where requested by the Indemnitee, providing copies of related court filings).

9.3.3 **Right to Participate in Defense**. Without limiting Section 9.3.2 above, any Indemnitee will be entitled to participate in, but not control, the defense of such Claim and to employ counsel of its choice for such purpose; provided, that such employment will be at the Indemnitee's own expense unless the employment thereof has been specifically authorized by the Indemnifying Party in writing.

9.3.4 **Settlement**. With respect to any Losses (a) relating solely to the payment of money damages in connection with a Claim and (b) that will not (i) result in the Indemnitee's becoming subject to injunctive or other relief, (ii) require an admission of fault by a Indemnitee, or (iii) otherwise adversely affect the business of the Indemnitee in any manner, and (c) that includes a complete release of the Indemnitee, the Indemnifying Party will have the sole right to enter into a settlement on such terms as AVROBIO, in its sole discretion, will deem appropriate. The Indemnifying Party will pay all Losses resulting from such settlement pursuant to the terms of such settlement, including any conditions set by the court adjudicating such Claim. With respect to all other Losses in connection with Claims, the Indemnifying Party will have authority to consent to the entry of any judgment, enter into any settlement or otherwise dispose of such Loss provided it obtains the prior written consent of the other Party and all relevant Indemnitees (which consent will be at the other Party's and such other Indemnitees' sole and absolute discretion).

9.3.5 **Cooperation**. Each Indemnitee will cooperate in the defense of any Claim by the Indemnifying Party under this Section 9 and will furnish such records, information and testimony, provide such witnesses and attend such conferences, discovery proceedings, hearings, trials and appeals as may be reasonably requested by the Indemnifying Party in connection with such defense. Such cooperation will include access during normal business hours afforded to counsel selected by the Indemnifying Party under Section 9.3.2 to, and reasonable retention by the Indemnitee, as required under applicable law, of records and information that are reasonably relevant to such Claim, and making a reasonably limited number of employees and agents available on a mutually convenient basis to provide additional information and explanation of any material provided hereunder. The Indemnifying Party will reimburse the Indemnitee for all its reasonable out-of-pocket expenses in connection therewith.

9.4 Expenses. Except as provided above, any costs and expenses, including fees and disbursements of counsel, incurred by an Indemnitee in connection with any Claim will be reimbursed on a [***] by the Indemnifying Party without prejudice to the Indemnifying Party's right to contest the Indemnitee's right to indemnification and subject to refund in the event the Indemnifying Party is ultimately held not to be obligated to indemnify the Indemnitee.

9.5 **Insurance**. AVROBIO shall have and maintain at its sole cost and expense, adequate liability insurance (including product liability insurance) to protect against potential liabilities and risk arising out of its activities under this Agreement and any agreement related hereto and upon such terms (including coverages, deductible limits and self-insured retentions) as are customary in the pharmaceutical industry generally for drug development activities; provided that, upon commencement of clinical trials of Licensed Product(s), such coverage will include a minimum per occurrence limit of [***] and upon commercialization of Licensed Products such coverage will include a minimum per occurrence limit of [***]. Such liability insurance shall insure against all types of liability, including personal injury, physical injury or property damage arising out of such AVROBIO's activities hereunder. Such policy shall include BioMarin as an additional insured and shall include a waiver of subrogation. At least [***] prior to initiation of any clinical trial of a Licensed Product, Provider shall provide to BioMarin certificates of insurance evidencing the above required insurance. This Section 9.5 shall not create any limitation on AVROBIO's liability under this Agreement, including with respect to its indemnification obligations under this Section 9.

10. LIMITATION OF LIABILITY

IN NO EVENT SHALL EITHER PARTY BE LIABLE FOR ANY INDIRECT, INCIDENTAL, SPECIAL, PUNITIVE, EXEMPLARY OR CONSEQUENTIAL DAMAGES, WHETHER BASED UPON A CLAIM OR ACTION OF CONTRACT, WARRANTY, NEGLIGENCE, STRICT LIABILITY OR OTHER TORT, OR OTHERWISE, ARISING OUT OF THE AGREEMENT; AND IN NO EVENT SHALL BIOMARIN'S LIABILITY FOR DIRECT DAMAGES UNDER THIS AGREEMENT EXCEED [***]. THE FOREGOING LIMITATIONS WILL NOT LIMIT EITHER PARTY'S OBLIGATIONS TO THE OTHER PARTY UNDER [***].

11. MISCELLANEOUS

11.1 Assignment. Without the prior written consent of the other Party hereto (which consent shall not be unreasonably withheld), a Party will not sell, transfer, assign, delegate, pledge or otherwise dispose of, whether voluntarily, involuntarily, by operation of law or otherwise, this Agreement or any of its rights or duties hereunder; *provided*, that a Party hereto may assign or transfer this Agreement and its rights or obligations hereunder without the consent of the other Party: (a) to any Affiliate of such Party; or (b) to any Third Party with which it merges or consolidates, or to which it transfers all or substantially all of its assets to which this Agreement relates, and provided that the foregoing consent obligation shall not limit the ability to grant sublicenses as permitted in this Agreement or to engage subcontractors to perform certain obligations hereunder. The assigning Party (except if it is not the surviving entity) will remain jointly and severally liable with the relevant Affiliate or Third Party assignee under this Agreement, and the relevant Affiliate assignee, Third Party assignee or surviving entity will assume in writing all of the assigning Party's obligations under this Agreement. Any purported assignment or transfer in violation of this Section 11.1 will be void ab initio and of no force or effect.

11.2 Severability. If any provision of this Agreement is held to be illegal, invalid or unenforceable under any present or future law, and if the rights or obligations of either Party under this Agreement will not be materially and adversely affected thereby, (a) such provision will be fully severable, (b) this Agreement will be construed and enforced as if such illegal, invalid or unenforceable provision had never comprised a part hereof, (c) the remaining

provisions of this Agreement will remain in full force and effect and will not be affected by the illegal, invalid or unenforceable provision or by its severance herefrom, and (d) in lieu of such illegal, invalid or unenforceable provision, there will be added automatically as a part of this Agreement a legal, valid and enforceable provision as similar in terms to such illegal, invalid or unenforceable provision as may be possible and reasonably acceptable to the Parties herein.

11.3 Governing Law; Dispute Resolution.

11.3.1 This Agreement, and any disputes between the Parties related to or arising out of this Agreement (including the Parties' relationship created hereby, the negotiations for and entry into this Agreement, its conclusion, binding effect, amendment, coverage, termination, or the performance or alleged non-performance of a Party of its obligations under this Agreement) (each a "**Dispute**"), will be governed by the laws of the State of Delaware without reference to any choice of law principles thereof that would cause the application of the laws of a different jurisdiction.

11.3.2 In the event of any Dispute, a Party may notify the other Party in writing of such Dispute, and such Dispute will be promptly referred to [***] ("**Senior Officers**") of each of the Parties (or their respective designees) who will use their good faith efforts to resolve the Dispute within [***] after it was referred to such Senior Officers. If such Senior Officers are unable to resolve such dispute within thirty (30) days of their first meeting for such negotiations, either Party may seek to have such dispute resolved in accordance with Section 11.3.3.

11.3.3 Any dispute arising under this Agreement, or other legal proceeding relating to this Agreement or the enforcement of any provision of this Agreement, if not resolved by the Senior Officers pursuant to Section 11.3.2, must be brought or otherwise commenced solely and exclusively in courts of competent jurisdiction located in the city of Wilmington, Delaware. Consistent with the preceding sentence, each of the Parties: (a) expressly and irrevocably consents and submits to the jurisdiction of the courts of competent jurisdiction in the city of Wilmington, Delaware in connection with any such legal proceeding; (b) expressly agrees that the courts of competent jurisdiction in the city of Wilmington, Delaware shall be deemed to be a convenient forum; and (c) expressly agrees not to assert (by way of motion, as a defense or otherwise), in any such legal proceeding commenced in the courts of competent jurisdiction in the city of Wilmington, Delaware, any claim that such Party is not subject personally to the jurisdiction of such court, that such legal proceeding has been brought in an inconvenient forum, that the venue of such proceeding is improper or that this Agreement or the subject matter of this Agreement may not be enforced in or by such court.

11.4 Notices. All notices or other communications that are required or permitted hereunder will be in writing and delivered personally, or sent by internationally-recognized overnight courier addressed as follows:

If to BioMarin. to:

BioMarin Pharmaceutical Inc.
105 Digital Drive
Novato, CA 94949
Attention: General Counsel

If to AVROBIO, to:

AVROBIO, Inc.
700 Technology Square, Suite 101
Cambridge, MA 02139
Attention: Chief Executive Officer

or to such other address as the Party to whom notice is to be given may have furnished to the other Party in writing in accordance herewith. Any such communication will be deemed to have been given (i) when delivered, if personally delivered, and (ii) on the second business day after dispatch, if sent by internationally-recognized overnight courier. It is understood and agreed that this Section 11.4 is not intended to govern the day-to-day business communications necessary between the Parties in performing their duties, in due course, under the terms of this Agreement.

11.5 Entire Agreement; Modifications. This Agreement including the Exhibits attached hereto, each of which is hereby incorporated and made part of in this Agreement by reference, sets forth and constitutes the entire agreement and understanding between the Parties with respect to the subject matter hereof and all prior agreements, understanding, promises and representations, whether written or oral, with respect thereto. Each Party confirms that it is not relying on any representations or warranties of the other Party except as specifically set forth herein. No amendment or modification of this Agreement will be binding upon the Parties unless in writing and duly executed by authorized representatives of both Parties.

11.6 Relationship of the Parties. It is expressly agreed that the Parties' relationship under this Agreement is strictly one of a pure contract relationship between BioMarin and AVROBIO, and that this Agreement does not create or constitute a partnership, joint venture, or agency. Neither Party will have the authority to make any statements, representations or commitments of any kind, or to take any action, which will be binding (or purport to be binding) on the other.

11.7 Waiver. Any term or condition of this Agreement may be waived at any time by the Party that is entitled to the benefit thereof, but no such waiver will be effective unless set forth in a written instrument duly executed by or on behalf of the Party waiving such term or condition. The waiver by either Party hereto of any right hereunder or of claims based on the failure to perform or a breach by the other Party will not be deemed a waiver of any other right hereunder or of any other breach or failure by said other Party whether of a similar nature or otherwise.

11.8 Counterparts. This Agreement may be executed in two or more counterparts, each of which will be deemed an original, but all of which together will constitute one and the same instrument.

11.9 No Benefit to Third Parties. The representations, warranties, covenants and agreements set forth in this Agreement are for the sole benefit of the Parties hereto and their successors and permitted assigns, and they will not be construed as conferring any rights on any other parties.

11.10 Further Assurance. Each Party will duly execute and deliver, or cause to be duly executed and delivered, such further instruments and do and cause to be done such further acts and things, including the filing of such assignments, agreements, documents and instruments, as may be necessary or as the other Party may reasonably request in connection with this Agreement or to carry out more effectively the provisions and purposes, or to better assure and confirm unto such other Party its rights and remedies under this Agreement.

11.11 English Language. This Agreement has been written and executed in the English language as used in the United States of America and will be interpreted in accordance with the English language as used in the United States of America. Any translation by a Party into any other language will not be an official version thereof, and in the event of any conflict in interpretation between the English version and such translation, the English version will control.

11.12 No Drafting Party. This Agreement has been submitted to the scrutiny of, and has been negotiated by, both Parties and their counsel, and will be given a fair and reasonable interpretation in accordance with its terms, without consideration or weight being given to any such terms having been drafted by any Party or its counsel. No rule of strict construction will be applied against either Party .

11.13 Construction. Except where the context otherwise requires, wherever used, the use of any gender will be applicable to all genders and the word "or" is used in the inclusive sense (and/or). The captions of this Agreement are for convenience of reference only and in no way define, describe, extend or limit the scope or intent of this Agreement or the intent of any provision contained in this Agreement. The term "including" as used herein means including, without limiting the generality of any description preceding such term. The word "any" will mean "any" unless otherwise clearly indicated by context. Unless the context requires otherwise, (a) any definition of or reference to any agreement, instrument or other document refer to such agreement, instrument or other document as from time to time amended, supplemented or otherwise modified (subject to any restrictions on such amendments, supplements or modifications set forth herein or therein), (b) any reference to any laws refer to such laws as from time to time enacted, repealed or amended, (c) the words "herein", "hereof and "hereunder", and words of similar import, refer to this Agreement in its entirety and not to any particular provision hereof, and (d) all references herein to Sections and Exhibits, unless otherwise specifically provided, refer to the Sections and Exhibits of this Agreement.

[Remainder of page intentionally left blank. Signature page follows.]

IN WITNESS WHEREOF, the Parties have executed this Agreement by their respective authorized representatives as of the date first written above.

BIOMARIN PHARMACEUTICAL INC.

By: /s/ G. Eric Davis

Name: G. Eric Davis

Title: Executive Vice President, General Counsel

AVROBIO, INC.

By: /s/ Geoff MacKay

Name: Geoff MacKay

Title: President & CEO

SCHEDULE A

LICENSED PATENT RIGHTS

[***]

[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]

[***]

[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]

SCHEDULE B

LICENSED KNOW-HOW

[***]

[***]

[***]

[***]

[***]

[***]

[***]

[***]

[***]

[***]

SCHEDULE C

ADDITIONAL CLAIMS FOR LICENSED PATENT RIGHTS

[***]

[***]

[***]

[***]

[***]

[***]

[***]

[***]

[***]

[***]