UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q/A

Amendment No. 1

(Mark One)

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended June 30, 2015

OR

☐ **TRANSITION REPORT UNDER SECTION 13 OR 15(d) OF THE EXCHANGE ACT OF 1934**

From the transition period from to .

Commission File Number 001-36076

FATE THERAPEUTICS, INC.

(Exact name of registrant as specified in its charter)

Delaware	**65-1311552**
(State or other jurisdiction of incorporation or organization)	(IRS Employer Identification No.)
3535 General Atomics Court, Suite 200, San Diego, CA	**92121**
(Address of principal executive offices)	(Zip Code)

(858) 875-1800

(Registrant's telephone number, including area code)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting 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 ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

As of August 3, 2015, 28,694,577 shares of the registrant's common stock, par value $0.001 per share, were issued and outstanding.

EXPLANATORY NOTE

Fate Therapeutics, Inc. (the "Company") is filing this Amendment No. 1 on Form 10-Q/A (this "Amendment") to its Quarterly Report on Form 10-Q (the "Original Report") solely to re-file Exhibits 4.2, 10.1 and 10.2 that were previously filed with the Original Report and to amend and restate the Index to Exhibits in response to comments from the Securities and Exchange Commission (the "SEC") regarding a confidential treatment request submitted to the SEC with respect to Exhibits 4.2, 10.1 and 10.2 of the Original Report.

This Amendment contains only the Cover Page to Form 10-Q, this Explanatory Note, the signature page to Form 10-Q, Index to Exhibits, Exhibits 4.2, 10.1 and 10.2, as amended, and Exhibits 31.1, 31.2, 32.1 and 32.2. This Amendment does not change the previously reported financial statements or, except as expressly described in the prior paragraph, any of the other disclosure contained in the Original Report. This Amendment speaks as of the original filing date of the Original Report and does not reflect any events that occurred at a date subsequent to the filing of the Original Report or modify or update those disclosures therein in any way. Accordingly, this Amendment should be read in conjunction with the Company's filings made with the SEC subsequent to the filing of the Original Report.

As required by Rule 12b-15 under the Securities Exchange Act of 1934, as amended, new certifications by the Company's principal executive officer and principal financial officer are being filed herewith as exhibits to this Amendment.

SIGNATURES

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

Fate Therapeutics, Inc.

Date: November 6, 2015

By: /s/ Christian Weyer
Christian Weyer
President and Chief Executive Officer
(Principal Executive Officer)

By: /s/ J. Scott Wolchko
J. Scott Wolchko
Chief Financial Officer and Chief Operating Officer
(Principal Financial and Accounting Officer)

Index to Exhibits

Exhibit Number	Description of Document
3.1	Amended and Restated Certificate of Incorporation (filed as Exhibit 3.2 to the registrant's Registration Statement on Form S-1/A (File No. 333-190608) filed with the SEC on August 29, 2013 and incorporated herein by reference).
3.2	Amended and Restated Bylaws (filed as Exhibit 3.4 to the registrant's Registration Statement on Form S-1/A (File No. 333-190608) filed with the SEC on August 29, 2013 and incorporated herein by reference).
4.1	Specimen Common Stock Certificate (filed as Exhibit 4.1 to the registrant's Registration Statement on Form S-1/A (File No. 333-190608) filed with the SEC on August 29, 2013 and incorporated herein by reference).
4.2†	Stock Purchase Agreement between the registrant and Juno Therapeutics, Inc., dated as of May 4, 2015.
10.1†	Collaboration and License Agreement between the registrant and Juno Therapeutics, Inc., dated as of May 4, 2015.
10.2†	Amendment to Amended and Restated Investor Rights Agreement between the registrant and certain of its stockholders, dated as of May 4, 2015.
31.1	Certification of Principal Executive Officer pursuant to Rules 13a-14 and 15-d-14 promulgated pursuant to the Securities Exchange Act of 1934, as amended, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of Principal Financial Officer pursuant to Rules 13a-14 and 15-d-14 promulgated pursuant to the Securities Exchange Act of 1934, as amended, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certification of Principal Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2	Certification of Principal Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS*	XBRL Instance Document
101.SCH*	XBRL Taxonomy Extension Schema Document
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF*	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB*	XBRL Taxonomy Extension Label Linkbase Document
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase Document

† Certain provisions of this Exhibit have been omitted pursuant to a request for confidential treatment.
* Previously filed with the Quarterly Report on Form 10-Q for the quarter ended June 30, 2015.

Exhibit 4.2

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 UNDER RULE 24b-2 OF THE SECURITIES EXCHANGE ACT OF 1934.

STOCK PURCHASE AGREEMENT

THIS STOCK PURCHASE AGREEMENT (this "***Agreement***") is made as of May 4, 2015 (the "***Effective Date***"), by and between **FATE THERAPEUTICS, INC.**, a Delaware corporation (the "***Company***"), having its principal place of business at 3535 General Atomics Court, Suite 200, San Diego, CA 92121, and **JUNO THERAPEUTICS, INC.**, a Delaware corporation (the "***Purchaser***"), having its principal place of business at 307 Westlake Ave N, 300, Seattle, WA 98109.

WHEREAS, the Company and the Purchaser have entered into that certain Collaboration and License Agreement of even date herewith (the "***License Agreement***"); and

WHEREAS, in connection with the License Agreement, the Company wishes to sell to the Purchaser, and the Purchaser wishes to purchase from the Company, shares of the Company's common stock, par value $0.001 per share ("***Common Stock***"), on the terms and subject to the conditions set forth in this Agreement.

AGREEMENT

In consideration of the mutual covenants contained in this Agreement, and for other good and valuable consideration, the receipt of which is hereby acknowledged, the Company and the Purchaser hereby agree as follows:

1. DEFINITIONS

Capitalized terms used but not defined herein shall have the meanings provided in the License Agreement. In addition, the following terms shall have the respective meanings set forth below:

1.1 ***"Affiliate"*** shall mean any corporation or other entity, whether *de jure* or *de facto*, which is directly or indirectly controlling, controlled by or under common control of a party hereto for so long as such control exists. For the purposes of this Section, ***"control"*** shall mean the direct or indirect ownership of at least 50% of the outstanding shares or other voting rights of the subject entity having the power to vote on or direct the affairs of the entity, or if not meeting the preceding, the maximum voting right that may be held by the particular Party under the laws of the country where such entity exists.

1.2 "***Aggregate Purchase Price***" shall mean, (a) with respect to the Initial Closing, the product of the Initial Closing Share Price multiplied by the number of Initial Closing Shares, and (b) with respect to the Extension Closing, the product of the Extension Closing Share Price multiplied by the number of Extension Closing Shares, in each case rounded up to the nearest whole penny.

1.3 ***"Acquisition Transaction"*** shall mean any transaction involving: (i) any sale, license, lease, exchange, transfer or other disposition of the assets of the Company or any subsidiary of the Company constituting more than 50% of the consolidated assets of the Company or accounting for more than 50% of the consolidated revenues of the Company in

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* Confidential Information, indicated by [***], has been omitted from this filing and filed separately with the Securities and Exchange Commission.

any one transaction or in a series of related transactions; (ii) any offer to purchase, tender offer, exchange offer or any similar transaction or series of related transactions made by any Person involving more than 50% of the outstanding shares of capital stock of the Company; or (iii) any merger, consolidation, business combination, share exchange, reorganization or similar transaction or series of related transactions involving the Company or any subsidiary of the Company whereby the holders of voting capital stock of the Company immediately prior to any such transaction hold less than 50% of the voting capital stock of the Company or the surviving corporation (or its parent company) immediately after the consummation of any such transaction.

1.4 "***Closing***" shall mean each of the Initial Closing and the Extension Closing, if any.

1.5 "***Closing Date***" shall mean each of the Initial Closing Date and the Extension Closing Date, if any.

1.6 "***Company Securities***" shall have the meaning set forth in Section 7.1.

1.7 "***Election Notice***" and "***Election Notice Date***" shall have the meaning set forth in Section 2.3(b).

1.8 "***Exchange Act***" shall mean the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

1.9 "***Extension Closing***," "***Extension Closing Date***" and "***Extension Closing Shares***" shall have the meanings set forth in Section 2.3(b).

1.10 ***"Extension Closing Share Price"*** shall mean 120% of the volume weighted average trading price per share of Common Stock for the 30 trading days ending on and including the Extension Notice Date, as reported on the Nasdaq Stock Market.

1.11 ***"Extension Notice"*** shall mean the written notice by Purchaser of the exercise of the Extension Option (as defined in Section 2.5 of the License Agreement).

1.12 ***"Extension Notice Date"*** shall mean the date of receipt by the Company of the Extension Notice, or if such date is not a trading day, the last trading day immediately prior to such date.

1.13 "***Initial Closing***," "***Initial Closing Date***" and "***Initial Closing Shares***" shall have the meanings set forth in Section 2.3(a).

1.14 "***Initial Closing Share Price***" shall mean $8.00 per share of Common Stock.

1.15 "***Nasdaq***" shall mean The Nasdaq Stock Market LLC.

1.16 "***Person***" shall mean any individual, corporation, limited liability company, partnership, association, trust, estate or other entity or organization.

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1.17 "***Restricted Transaction***" shall have the meaning set forth in Section 7.1.

1.18 "***Rule 144***" shall have the meaning set forth in Section 4.8(a).

1.19 "***SEC***" shall mean the U.S. Securities and Exchange Commission.

1.20 "***SEC Filings***" shall mean all reports, schedules, forms, statements and other documents filed or required to be filed by the Company with the SEC pursuant to the requirements of the Securities Act or the Exchange Act, including material filed pursuant to Section 13(a) or 15(c) of the Exchange Act, in each case, together with all exhibits, supplements, amendments and schedules thereto, and all documents incorporated by reference therein.

1.21 "***Securities Act***" shall mean the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

1.22 "***Shares***" shall mean the shares of Common Stock purchased under this Agreement.

1.23 "***Share Price***" shall mean the Initial Closing Share Price or the Extension Closing Share Price, as applicable.

2. AGREEMENT TO SELL AND PURCHASE

2.1 **Authorization of Shares.** The Company has authorized the sale and issuance to the Purchaser of the Shares under the terms and conditions of this Agreement.

2.2 **Sale and Issuance of Shares.** On the basis of the representations and warranties herein, and upon the terms and subject to the conditions hereof, the Purchaser agrees to purchase from the Company, and the Company agrees to issue and sell to the Purchaser, the Shares at a price per share equal to the applicable Share Price.

2.3 **Closings.**

(a) **Initial Closing.** Subject to the satisfaction or waiver of the conditions set forth herein, the initial Closing (the "***Initial Closing***") shall take place on the 3rd calendar day following the Effective Date (or, if such 3rd calendar day is not a business day, the next business day subsequent to such 3rd calendar day) at the offices of the Company or at such earlier time and such other place as the Company and the Purchaser may agree in writing (the date of the Initial Closing, the "***Initial Closing Date***"). At the Initial Closing, (i) the Company shall deposit 1,000,000 Shares (the "***Initial Closing Shares***") with its transfer agent to be held in book entry form for the benefit of, and in the name of, the Purchaser and (ii) the Purchaser shall pay the Aggregate Purchase Price for the Initial Closing Shares in U.S. dollars by bank wire transfer in immediately available funds to a bank account designated by the Company.

(b) **Extension Closing.** Subject to the satisfaction or waiver of the conditions set forth herein, an additional Closing (the "***Extension Closing***") shall take place

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on the 3rd calendar day (or, if such 3rd calendar day is not a business day, the next business day subsequent to such 3rd calendar day) following the receipt by the Purchaser of the Company's written election provided pursuant to Section 5.2(b) of the License Agreement (the "***Election Notice***" and the date of such Election Notice, the "***Election Notice Date***") at the offices of the Company or at such earlier time and such other place as the Company and the Purchaser may agree in writing (the date of the Extension Closing, the "***Extension Closing Date***"). At the Extension Closing, (i) the Company shall deposit the Extension Closing Shares (defined below) with its transfer agent to be held in book entry form for the benefit of, and in the name of, the Purchaser and (ii) the Purchaser shall pay the Aggregate Purchase Price for the Extension Closing Shares in U.S. dollars by bank wire transfer in immediately available funds to a bank account designated by the Company. "***Extension Closing Shares***" shall mean that number of Shares as is equal to the lesser of (A) 0.0999 multiplied by the number of shares of the Company's Common Stock outstanding as of the Election Notice Date, rounded down to the nearest whole share, minus the number of Initial Closing Shares purchased pursuant to Section 2.3(a) of this Agreement and (B) $10,000,000 divided by the Extension Closing Share Price, rounded down to the nearest whole share; provided, however, that to the extent that the purchase of such Extension Closing Shares in addition to the Initial Closing Shares would result in Purchaser beneficially owning in excess of 19.99% of the outstanding shares of Common Stock or the voting power of the Company as of immediately prior to the Effective Date (the "***Ownership Maximum***"), then the number of Extension Closing Shares purchased by Purchaser pursuant to this Agreement shall be reduced to the extent necessary such that such beneficial ownership does not exceed the Ownership Maximum. For the avoidance of doubt, if the Company does not deliver the Election Notice pursuant to Section 5.2(b) of the License Agreement within the time period specified therein, there will not be an Extension Closing and the Purchaser shall have no rights or obligations to acquire Shares under this Section 2.3(b).

(c) The parties agree that the aggregate number of shares to be issued at all Closings shall not exceed such number of shares that is equal to 19.99% of the outstanding shares of Common Stock or the voting power of the Company as of immediately prior to the Effective Date.

2.4 **Purchase Price Allocation**. The parties agree that for income tax purposes, the amount of the premium of each of the Initial Closing Share Price and the Extension Closing Share Price, as applicable, over the fair market value of the applicable Shares as of the applicable Closing Date shall be deemed additional consideration to the Company pursuant to the License Agreement, and the fair market value of the applicable Shares shall be deemed consideration to the Company for the issuance of such Shares. The Company, in its sole discretion shall make all decisions relating to the determination of the value of shares for purposes of this section. The parties shall file all income tax returns in a manner consistent with this section, and shall not take any income tax position inconsistent with this section in any tax proceeding or context, unless required by a final determination, within the meaning of section 1313 of the Internal Revenue Code of 1986, as amended (or any similar provision or non-federal income tax law).

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3. REPRESENTATIONS, WARRANTIES AND COVENANTS OF THE COMPANY

The Company hereby represents and warrants to the Purchaser as of each Closing Date as follows:

3.1 **Organization, Good Standing and Qualification**. The Company is a corporation duly organized, validly existing and in good standing under the laws of the State of Delaware and has all requisite corporate power and authority to carry on its business. The Company is duly qualified to transact business as a corporation and is in good standing in each jurisdiction in which the failure so to qualify would have a material adverse effect upon the Company's ability to perform its obligations under this Agreement.

3.2 **Authorization; Due Execution.** The Company has the requisite corporate power and authority to enter into this Agreement and to perform its obligations under the terms of this Agreement. All corporate action on the part of the Company, its officers, directors and stockholders necessary for the authorization, execution and delivery of this Agreement has been taken. This Agreement has been duly authorized, executed and delivered by the Company and, upon due execution and delivery by the Purchaser, this Agreement will be a valid and binding obligation of the Company, enforceable in accordance with its terms, except as enforceability may be limited by bankruptcy, insolvency, reorganization, moratorium or similar laws affecting creditors' rights generally or by equitable principles.

3.3 **Valid Issuance of Stock.** The Shares, when issued, sold and delivered in accordance with the terms of Section 2 hereof for the consideration and on the terms and conditions set forth herein, will be duly and validly authorized and issued, fully paid and nonassessable and, based in part upon the representations of the Purchaser in this Agreement, will be issued in compliance with all applicable federal and state securities laws.

3.4 **No Violations or Defaults**. There exists no violation or default by the Company or any of its subsidiaries under (i) the Company's Amended and Restated Certificate of Incorporation or Amended and Restated Bylaws, each as amended to date (copies of which have been filed with the SEC), or such subsidiaries' charters, bylaws or other organizational documents, or (ii) the provisions of any instrument or agreement evidencing, governing or otherwise relating to any material indebtedness of the Company or any of its subsidiaries. There exists no default under any other agreement to which the Company or any of its subsidiaries is party, which default could have a material adverse effect upon the Company's ability to perform its obligations under this Agreement.

3.5 **SEC Filings.** The Company has timely filed with the SEC all SEC Filings. The SEC Filings were prepared in accordance with and, as of the date on which each such SEC Filing was filed with the SEC, complied in all material respects with the applicable requirements of the Securities Act and Exchange Act. None of such SEC Filings, including, without limitation, any financial statements, exhibits and schedules included therein and documents incorporated therein by reference, at the time filed, declared effective or mailed, as the case may be, contained an untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading.

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3.6 **Material Changes.** Since December 31, 2014, except as specifically disclosed in SEC Filings dated prior to the Effective Date (in the case of the Initial Closing) or dated prior to the Extension Notice Date (in the case of the Extension Closing): (i) there have been no events, occurrences or developments that have had or would reasonably be expected to have, either individually or in the aggregate, a material adverse effect on the business, operations or financial condition of the Company and its subsidiaries, taken as a whole, (ii) the Company has not incurred any material liabilities (contingent or otherwise) other than (A) trade payables and accrued expenses incurred in the ordinary course of business consistent with past practice and (B) liabilities not required to be reflected in the Company's financial statements pursuant to generally accepted accounting principles in the United States ("***GAAP***") or disclosed in filings made with the SEC, (iii) the Company has not altered materially its method of accounting or the manner in which it keeps its accounting books and records, (iv) the Company has not declared or made any dividend or distribution of cash, shares of capital stock or other property to its stockholders or purchased, redeemed or made any agreements to purchase or redeem any shares of its capital stock (other than in connection with repurchases of unvested stock issued to employees of the Company), and (v) the Company has not issued any equity securities, except Common Stock issued pursuant to existing Company equity incentive, stock option or stock purchase plans or agreements or executive and director compensation arrangements disclosed in the SEC Filings dated prior to the Effective Date (in the case of the Initial Closing) or dated prior to the Extension Notice Date (in the case of the Extension Closing).

3.7 **Investment Company.** The Company is not, and immediately after receipt of payment for the Shares, will not be an "investment company" within the meaning of the Investment Company Act of 1940, as amended. The Company shall conduct its business in a manner so that it will not become subject to the Investment Company Act of 1940, as amended.

3.8 **Registration Rights.** Other than as disclosed in the Company's SEC Filings, no Person has any right to cause the Company to effect the registration under the Securities Act of the transfer of any securities of the Company.

3.9 **Listing and Maintenance Requirements.** The Common Stock is registered pursuant to Section 12(b) of the Exchange Act, and the Company has taken no action designed to terminate the registration of the Common Stock under the Exchange Act nor has the Company received any notification that the SEC is contemplating terminating such registration. The Company has not, in the previous twelve (12) months, received (i) written notice from Nasdaq that the Company is not in compliance with the listing or maintenance requirements of Nasdaq that would result in immediate delisting or (ii) any notification, Staff Delisting Determination, or Public Reprimand Letter (as such terms are defined in applicable Nasdaq listing rules) that requires a public announcement by the Company of any noncompliance or deficiency with respect to such listing or maintenance requirements (other than any public announcement relating to noncompliance or deficiency under Rules 5605(b)(1), 5605(c)(2), 5605(d)(2), 5450(a)(1), or 5250(c)(1) of the Nasdaq listing rules). The Company is in compliance with all listing and maintenance requirements of Nasdaq on the date hereof, except for any noncompliance or deficiency which may exist under Rules 5605(b)(1), 5605(c)(2), 5605(d)(2), 5450(a)(1), or 5250(c)(1) of the Nasdaq listing rules and

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in each such case where the Company fully expects to, and has a plan to, regain compliance in accordance with applicable Nasdaq procedures and cure periods such as to avoid any suspension of trading of the Company's stock on Nasdaq or delisting actions by Nasdaq.

3.10 **No Integrated Offering.** Assuming the accuracy of Purchaser's representations and warranties set forth in Sections 4.4 — 4.7 hereof, none of the Company nor, to the Company's knowledge, any of its Affiliates or any Person acting on its behalf has, directly or indirectly, at any time within the past six (6) months, made any offers or sales of any Company security or solicited any offers to buy any security under circumstances that would (i) eliminate the availability of the exemption from registration under Regulation D under the Securities Act in connection with the offer and sale by the Company of the Shares or (ii) cause the offering of the Shares to be integrated with prior offerings by the Company for purposes of any applicable law, regulation or stockholder approval provisions, including, without limitation, under the rules and regulations of Nasdaq.

3.11 **OFAC.** Neither the Company nor, to the Company's knowledge, any director, officer, agent, employee, Affiliate or Person acting on behalf of the Company is currently subject to any U.S. sanctions administered by the Office of Foreign Assets Control of the U.S. Treasury Department ("***OFAC***"); and the Company will not directly or indirectly use the proceeds of the sale of the Shares, or lend, contribute or otherwise make available such proceeds to any subsidiary, joint venture partner or other Person or entity, towards any sales or operations in Cuba, Iran, Syria, Sudan, Myanmar or any other country sanctioned by OFAC or for the purpose of financing the activities of any Person currently subject to any U.S. sanctions administered by OFAC.

3.12 **FCPA.** Neither the Company nor, to the Company' knowledge, any agent or other Person acting on behalf of the Company, has: (i) directly or indirectly, used any funds for unlawful contributions, gifts, entertainment or other unlawful expenses related to foreign or domestic political activity, (ii) made any unlawful payment to foreign or domestic government officials or employees or to any foreign or domestic political parties or campaigns from corporate funds, (iii) failed to disclose fully any contribution made by the Company (or made by any Person acting on its behalf of which the Company is aware) which is in violation of law or (iv) violated in any material respect any provision of the Foreign Corrupt Practices Act of 1977, as amended.

3.13 **Internal Accounting Controls.** The Company maintains a system of internal accounting controls sufficient to provide reasonable assurance that (i) transactions are executed in accordance with management's general or specific authorizations, (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with GAAP and to maintain asset and liability accountability, (iii) access to assets or incurrence of liabilities is permitted only in accordance with management's general or specific authorization, and (iv) the recorded accountability for assets and liabilities is compared with the existing assets and liabilities at reasonable intervals and appropriate action is taken with respect to any differences.

3.14 **Sarbanes-Oxley; Disclosure Controls.** As of the date of the Initial Closing, the Company is an "emerging growth company," as defined in Section 2(a) of the

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Securities Act. The Company is in compliance in all material respects with all of the provisions of the Sarbanes-Oxley Act of 2002 that are applicable to the Company. The Company has established disclosure controls and procedures (as such term is defined in Rule 13a-15(e) and 15d-15(e) under the Exchange Act) for the Company and designed such disclosure controls and procedures to ensure that information required to be disclosed by the Company in the reports it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Commission's rules and forms. The Company's certifying officers have evaluated the effectiveness of the Company's disclosure controls and procedures as of the end of the period covered by the Company's most recently filed periodic report under the Exchange Act (such date, the "***Evaluation Date***"). The Company presented in its most recently filed periodic report under the Exchange Act the conclusions of the certifying officers about the effectiveness of the disclosure controls and procedures based on their evaluations as of the Evaluation Date. Since the Evaluation Date, there has been no change in the Company's internal control over financial reporting (as such term is defined in the Exchange Act) that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

3.15 **Governmental Consents.** No consent, approval, order or authorization of, or registration, qualification, designation, declaration or filing with, any federal, state, local or provincial governmental or regulatory authority or securities exchange on the part of the Company is required in connection with the consummation of the transactions contemplated by this Agreement, except for such notices or additional listing applications required or permitted to be filed with certain state and federal securities commissions or securities exchanges after the Closing Date, which notices and applications will be filed on a timely basis.

3.16 **No Required Additional Issuances.** The issuance and sale of the Shares will not obligate the Company to issue shares of Common Stock or other securities to any Person and will not result in a right of any holder of securities of the Company to adjust the exercise, conversion, exchange or reset price under any of such securities.

3.17 **Application of Takeover Protections; Rights Agreements.** The Company and its Board of Directors have taken all necessary action, if any, in order to render inapplicable any control share acquisition, business combination, poison pill (including any distribution under a rights agreement) or other similar anti-takeover provision under the Company's charter documents or the laws of the State of Delaware that is or would reasonably be expected to become applicable to the Purchaser as a result of Purchaser and the Company fulfilling their obligations or exercising their rights under this Agreement or the License Agreement, including, without limitation, the Company's issuance of the Shares and Purchaser's ownership of the Shares.

3.18 **No Conflict.** The Company's execution, delivery and performance of this Agreement does not violate (i) any provision of the Company's Amended and Restated Certificate of Incorporation or Amended and Restated Bylaws, each as amended to date (copies of which have been filed with the SEC), (ii) any provision of any material contract or agreement (copies of which have been filed with the SEC), or order, writ, judgment,

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injunction, decree, determination or award to which the Company is a party or by which it is bound, or (iii) to the Company's knowledge, any law, rule or regulation currently in effect having applicability to the Company.

4. REPRESENTATIONS, WARRANTIES AND COVENANTS OF THE PURCHASER

The Purchaser hereby represents and warrants to the Company as of each Closing Date as follows:

4.1 **Organization and Good Standing**. The Purchaser is a corporation duly organized, validly existing and in good standing under the laws of its jurisdiction of incorporation and has all requisite corporate power and authority to carry on its business.

4.2 **Authorization; Due Execution.** The Purchaser has the requisite corporate power and authority to enter into this Agreement and to perform its obligations under the terms of this Agreement. All corporate action on the part of the Purchaser, its officers, directors and stockholders necessary for the authorization, execution and delivery of this Agreement have been taken. This Agreement has been duly authorized, executed and delivered by the Purchaser, and, upon due execution and delivery by the Company, this Agreement will be a valid and binding obligation of the Purchaser, enforceable in accordance with its terms, except as enforceability may be limited by bankruptcy, insolvency, reorganization, moratorium or similar laws affecting creditors' rights generally or by equitable principles.

4.3 **No Current Ownership in the Company.** Other than the Shares acquired under this Agreement, neither the Purchaser nor any of its Affiliates own any shares of Common Stock or have any rights to acquire Common Stock.

4.4 **Purchase Entirely for Own Account.** This Agreement is made with the Purchaser in reliance upon the Purchaser's representation to the Company, which the Purchaser hereby confirms by executing this Agreement, that the Shares purchased by the Purchaser will be acquired for investment for the Purchaser's own account, not as a nominee or agent, and not with a view to the resale or distribution of any part thereof, and that the Purchaser has no present intention of selling, granting any participation in, or otherwise distributing the same. Purchaser does not have any contract, undertaking, agreement or arrangement with any Person to sell, transfer or grant participation to such Person or to any third party, with respect to the Shares, if issued.

4.5 **Disclosure of Information.** The Purchaser has received all the information that it has requested and that it considers necessary or appropriate for deciding whether to enter into this Agreement and to acquire the Shares, and the Purchaser further represents that it has had an opportunity to ask questions and receive answers from the Company regarding the terms and conditions of the offering of the Shares; provided, however, that neither such inquiries nor any other investigation conducted by or on behalf of the Purchaser or its representatives or counsel shall modify, amend or affect Purchaser's right to rely on the truth, accuracy and completeness of the Company's representations and warranties contained in this Agreement or the License Agreement.

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4.6 **Investment Experience.** The Purchaser acknowledges that it is able to fend for itself, can bear the economic risk of its investment and has such knowledge and experience in financial or business matters that it is capable of evaluating the merits and risks of the investment in the Shares. The Purchaser has not been organized solely for the purpose of acquiring the Shares.

4.7 **Accredited Investor.** The Purchaser is an "accredited investor" as such term is defined in Rule 501 of the General Rules and Regulations promulgated by the SEC pursuant to the Securities Act.

4.8 **Restricted Securities.** The Purchaser understands that:

(a) the Shares will not be registered under the Securities Act by reason of a specific exemption therefrom, and that the Purchaser must, therefore, bear the economic risk of such investment, unless and until a subsequent disposition thereof is registered under the Securities Act or is exempt from such registration, such as under Rule 144 of the Securities Act (***"Rule 144"***);

(b) each book-entry entitlement representing the Shares will be noted with the following legends:

(i) THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 (THE "*ACT*") AND MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, ASSIGNED, PLEDGED OR HYPOTHECATED UNLESS AND UNTIL REGISTERED UNDER THE ACT OR UNLESS THE COMPANY HAS RECEIVED AN OPINION OF COUNSEL SATISFACTORY TO THE COMPANY AND ITS COUNSEL THAT SUCH REGISTRATION IS NOT REQUIRED; and

(ii) Any legend required to be placed thereon under applicable state securities laws.

(c) The Company will instruct its transfer agent not to register the transfer of the Shares (or any portion thereof) unless the conditions specified in the foregoing legends are satisfied, until such time as a transfer is made, pursuant to the terms of this Agreement, and in compliance with Rule 144 or pursuant to a registration statement or, if the opinion of counsel referred to above is to the further effect that such legend is not required in order to establish compliance with any provisions of the Securities Act or this Agreement.

4.9 **No Short Sales.** The Purchaser has not engaged, and will not engage, in any short sales of the Company's Common Stock within the three month period prior to the applicable Closing Date.

4.10 **No Legal, Tax or Investment Advice.** The Purchaser understands that nothing in the SEC Filings, this Agreement or any other materials presented to the Purchaser in connection with the purchase and sale of the Shares constitutes legal, tax or investment advice and that independent legal counsel has reviewed these documents and materials on the Purchaser's behalf. The Purchaser has consulted such legal, tax and investment advisors as

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it, in its sole discretion, has deemed necessary or appropriate in connection with its purchase of the Shares.

5. CONDITIONS TO THE COMPANY'S OBLIGATIONS AT CLOSING

5.1 **Closing**. The Company's obligation to sell, issue and deliver the Shares to the Purchaser at each Closing shall be subject to the following conditions to the extent not waived by the Company:

(a) **Receipt of Payment**. The Company shall have received payment in full, by wire transfer of immediately available funds, for the Shares at the applicable Share Price.

(b) **License Agreement.** The License Agreement shall have been executed and delivered by the Company and the Purchaser and shall remain in full force and effect.

(c) **Representations and Warranties; Obligations.** The representations and warranties made by the Purchaser in Section 4 hereof shall be true and correct on the applicable Closing Date. The Purchaser shall have performed and complied with all obligations and conditions required to be performed and complied with by the Purchaser under this Agreement on, as of or prior to the applicable Closing Date.

(d) **Provision of Election Notice.** With respect to the Extension Closing, the Company shall have delivered the Election Notice to the Purchaser in accordance with Section 5.2(b) of the License Agreement.

6. CONDITIONS TO THE PURCHASER'S OBLIGATIONS AT CLOSING

6.1 **Closing.** The Purchaser's obligation to accept delivery of and pay for the Shares at each Closing shall be subject to the following conditions to the extent not waived by the Purchaser:

(a) **License Agreement.** The License Agreement shall have been executed and delivered by the Company and the Purchaser and shall remain in full force and effect.

(b) **Representations and Warranties; Obligations.** The representations and warranties made by the Company in Section 3 hereof shall be true and correct on the applicable Closing Date. The Company shall have performed and complied with all obligations and conditions to be performed and complied with by the Company under this Agreement on, as of or prior to the applicable Closing Date.

(c) **Compliance Certificate.** The Purchaser shall have received a certificate, dated such Closing Date, of an executive officer of the Company in which such officer, in his or her capacity as an officer of the Company, shall state that: the representations and warranties of the Company in this Agreement are true and correct; and

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the Company has complied with all agreements and satisfied all conditions on its part to be performed or satisfied hereunder at or prior to such Closing Date.

(d) **Secretary's Certificate.** The Purchaser shall have received a certificate, dated such Closing Date, of the secretary of the Company in which such secretary, in his or her capacity as secretary of the Company, shall certify and attach the resolutions of the Board of Directors of the company approving the Agreement, the License Agreement and the transactions contemplated hereunder, and shall certify that such resolutions have not been amended or modified and remain in full force and effect.

(e) **Good Standing Certificate.** The Purchaser shall have received a certificate from the Secretary of State of the State of Delaware dated within three (3) business days of such Closing Date evidencing the good standing and legal corporate existence of the Company.

(f) **Opinion of Counsel to the Company.** The Purchaser shall have received an opinion, dated such Closing Date, of Goodwin Procter LLP, counsel for the Company, in the form attached hereto as Exhibit A.

(g) **Registration Rights.** With respect to the Extension Closing, the Company shall have caused Purchaser to become a party to that certain Amended and Restated Investor Rights Agreement, dated as of August 8, 2013 (the "***IRA***"), among the Company and the securityholders listed on Exhibits A and B thereto, and to have the rights and obligations of, and be treated as, an Initiating Holder (as defined in the IRA), an S-3 Initiating Holder (as defined in the IRA), and a Holder (as defined in the IRA) thereunder beginning two (2) years after the Effective Date of the License Agreement and which will not include any registration rights that have been waived by existing securityholders under the IRA with respect to offerings of securities by the Company that may be conducted pursuant to the Company's Registration Statement on Form S-3 (File No. 333-199107), and shall have amended the IRA to provide that Purchaser's registration rights thereunder shall survive until the earlier of (i) one year following the end of the Research Term or (ii) such time as Rule 144 under the Securities Act is available for the sale of all of Purchaser's Shares during a three-month period without registration and without breach of the restrictions set forth in this Agreement (and assuming for the purposes of Rule 144 that Purchaser is subject to the volume limitations thereof as if Purchaser were an "affiliate" within the meaning of Rule 144).

(h) **Exercise of Extension Option.** With respect to the Extension Closing, the Purchaser shall have exercised the Extension Option in accordance with Section 2.5 of the License Agreement.

7. ADDITIONAL COVENANTS OF THE COMPANY AND THE PURCHASER.

7.1 **Restricted Transactions**. For the Research Term (as defined in the License Agreement), the Purchaser shall not, and shall not authorize, instruct, facilitate or permit any of its Affiliates or any other Person or entity to, engage in any of the following (a "***Restricted Transaction***"): (a) offer, sell or contract to sell securities of the Company or any of its

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Affiliates or successors or any instruments convertible into or exchangeable or exercisable for securities of the Company or any of its Affiliates or successors (the "***Company Securities***") in a private placement or similar transaction; (b) sell any option or contract to purchase, purchase any option or contract to sell, or grant any option, right or warrant for the sale of the Company Securities; or (c) enter into any swap or any other agreement or any transaction that transfers, in whole or in part directly or indirectly, the economic consequence of ownership of the Company Securities, whether any such swap or transaction is to be settled by delivery of Common Stock or other securities, in cash or otherwise.

7.2 **Standstill**.

(a) The Purchaser agrees that during the Research Term (as defined in the License Agreement), except with the prior written consent of the Company, the Purchaser shall not, and shall not permit any of its officers, directors, investment advisors, agents, representatives or Affiliates to:

(i) except pursuant to Section 2.3(b) hereof, acquire, offer to acquire, agree to acquire or cause or effect the acquisition of, directly or indirectly, by purchase or otherwise, beneficial ownership of any securities or instruments convertible into any of the Company Securities such that the aggregate beneficial ownership of the Purchaser, its officers, directors (but excluding for these purposes beneficial ownership of Robert Nelsen through ARCH Venture Fund VI, L.P.) and Affiliates (on a combined basis), if (A) subsequent to the Extension Closing Date, is 20% or more of the Company's outstanding Common Stock, and (B) prior to the Extension Closing Date, is [***]% or more of the Company's outstanding Common Stock calculated as of immediately prior to the Effective Date;

(ii) solicit or encourage any other entity to solicit proxies (as such terms are defined in Regulation 14A under the Exchange Act) with respect to any matter involving the Company, its nominees for directors or otherwise initiate, propose or solicit, or induce any other Person to initiate, propose or solicit any stockholder of the Company, any stockholder proposal or director nominations, any tender offer for Company Securities, any change of control of the Company, or for the purpose of convening a stockholders' meeting of the Company;

(iii) except with respect to proxies executed in connection with stockholder meetings, deposit any Company Securities in any voting trust or subject them to any voting agreement or other agreement of similar effect;

(iv) join or form any partnership, limited partnership, syndicate, or other group within the meaning of Section 13(d)(3) of the Exchange Act for the purpose of acquiring, holding or disposing of beneficial ownership of any Company Securities or encourage, advise or, for the purpose of circumventing or avoiding any of the provisions of this Agreement, assist any Person to do any of the foregoing or otherwise take any action individually or jointly with any partnership, limited partnership, syndicate, or other group or assist any other Person or group of Persons in taking any action it could not individually take under this Agreement;

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(v) make, effect, cause, initiate or participate in any Acquisition Transaction with respect to the Company (for the avoidance of doubt, Purchaser may directly engage Company's management and/or its Board of Directors in private discussions with respect to an Acquisition Transaction by and between Purchaser and Company); or

(vi) make any public proposals to the Company or any of its Affiliates, directors, officers, employees, agents, representatives, successors or security holders concerning, or otherwise announce any intention to effect or participate in any Acquisition Transaction relating to the Company or any Affiliate or successor of the Company or take any action that would require the Company to make a public announcement regarding the possibility of an Acquisition Transaction with the Purchaser or any of its Affiliates.

(b) **Termination of Standstill**. The obligations of the Purchaser under Section 7.2(a) shall terminate in the event of (i) any *bona fide* third party tender or exchange offer for at least 50% of the outstanding voting capital stock of the Company, which third party tender or exchange offer was not solicited or otherwise encouraged by the Purchaser, or (ii) the Company enters into any agreement for an Acquisition Transaction with any entity not affiliated with the Purchaser pursuant to a proposal by such third party, which third party proposal was not solicited or otherwise encouraged by the Purchaser. All of the provisions of Section 7.2(a) shall be reinstated and shall apply in full force according to their terms in the event that any event set forth in this Section 7.2(b) is not completed or if the announced transaction is abandoned and no similar transaction has been announced and not abandoned within ninety (90) days thereafter. Upon reinstatement of the provisions of Section 7.2(a), the provisions of this Section 7.2(b) shall continue to govern in the event that any of the events described in this Section 7.2(b) shall occur.

7.3 **Market Stand-Off.** If requested by the representative of the underwriters of Common Stock (or other securities) of the Company, provided that Purchaser is then a beneficial owner of 5% or greater of the Company's outstanding Common Stock, the Purchaser shall enter into a customary lock-up agreement with the representative of the underwriters not to sell or otherwise transfer or dispose of any Common Stock (or other securities) of the Company held by the Purchaser for a period specified by the representative of the underwriters, in any case not to exceed 90 days following any registered offering of the Common Stock of the Company, provided that all officers, all directors and their affiliates, and all stockholders which then beneficially own 5% or greater of the Company's outstanding Common Stock (excluding investment companies or institutional investors that are not venture capital firms, which, for purposes of illustration only, based on the beneficial ownership table included in the Company's proxy statement filed on Schedule 14A with the SEC on April 2, 2015, would exclude only FMR LLC, Wellington Management Group LLC, and Kingdon Capital Management, L.L.C.) are bound by substantially the same lock-up agreement. Any discretionary waiver or termination of the restrictions of any or all of such lock-up agreements by the underwriters shall apply pro rata to all parties subject to such lock-up agreements, based on the number of shares subject to such lock-up agreements. The Company may impose stop-transfer instructions with respect to the shares of Common Stock (or other securities) subject to the foregoing restriction until the end of said periods.

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7.4 **Shareholder Rights Plan.** No claim will be made or enforced by the Company or, with the consent of the Company, any other Person, that the Purchaser is an "Acquiring Person" under any control share acquisition, business combination, poison pill (including any distribution under a rights agreement) or similar anti-takeover plan or arrangement in effect or hereafter adopted by the Company, or that the Purchaser could be deemed to trigger the provisions of any such plan or arrangement, in either case solely by virtue of purchasing the Shares under this Agreement.

7.5 **Nasdaq Listing.** In the time and manner required by Nasdaq, the Company shall prepare and file with Nasdaq an additional shares listing application covering all of the Shares and shall use its commercially reasonable efforts to take all steps necessary to cause all of the Shares to be approved for listing on Nasdaq. The Company shall maintain compliance with all listing and maintenance requirements of Nasdaq on the date hereof, except for any noncompliance or deficiencies that may occur under Rules 5605(b)(1), 5605(c)(2), 5605(d)(2), 5450(a)(1), or 5250(c)(1) of the Nasdaq listing rules and in the event of any noncompliance or deficiency pursuant to such rules the Company shall use its best efforts to regain compliance in accordance with applicable Nasdaq procedures and cure periods such as to avoid any suspension of trading of the Company's stock on Nasdaq or delisting actions by Nasdaq.

7.6 **Legend Removal.** The legends set forth in Section 4.8(b) above shall be removed and the Company shall instruct its transfer agent for the Common Stock (the "***Transfer Agent***") to register the Shares in book-entry form free and clear of such legends or any other legends by electronic delivery at the applicable balance account at the Depository Trust Company, if (i) such Shares have been resold under an effective registration statement under the Securities Act, (ii) such Shares are sold or transferred in connection with a resale transaction in compliance with Rule 144 (if the transferor is not an Affiliate of the Company), or (iii) such Shares are eligible for resale under Rule 144, without the requirement for the Company to be in compliance with the current public information required under Rule 144 as to such Shares and without volume or manner-of-sale restrictions. The Company further agrees that it shall cause its counsel (i) after the effective date of a registration statement registering the resale of the Shares, to issue to the Transfer Agent, if required by the Transfer Agent, a "blanket" legal opinion or other letter to allow sales without restriction pursuant to the effective registration statement and (ii) provide all other opinions of counsel as may reasonably be required by the Transfer Agent in connection with the removal of legends pursuant to this Section 7.6. Following Rule 144 becoming available for the resale of the Shares, without the requirement for the Company to be in compliance with the current public information required under Rule 144 as to the Shares and without volume or manner-of-sale restrictions, the Company, upon the request of the Purchaser, shall cause Company counsel or other counsel satisfactory to the Transfer Agent to issue to the Transfer Agent a legal opinion stating that the Shares are eligible for sale under Rule 144 without the requirement for the Company to be in compliance with the current public information required under Rule 144 as to such securities and without volume or manner-of-sale restrictions. Any fees (with respect to the Transfer Agent, Company counsel or otherwise) associated with the issuance of such opinion or the removal of such legends shall be borne by the Company. The Company may not make any notation on its records or give

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instructions to the Transfer Agent that enlarge the restrictions on transfer set forth in Section 4.8(b), other than with respect to any lock-up restrictions in connection with Section 7.3.

7.7 **Registration Rights.** The Company shall promptly and, in any event, within thirty (30) calendar days after the Effective Date, take all action necessary to cause Purchaser to become a party to the IRA and to have the rights and obligations of, and be treated as, an Initiating Holder (as defined in the IRA), an S-3 Initiating Holder (as defined in the IRA), and a Holder (as defined in the IRA) thereunder beginning two years after the Effective Date of the License Agreement and which will not include any registration rights that have been waived by existing securityholders under the IRA with respect to offerings of securities by the Company that may be conducted pursuant to the Company's Registration Statement on Form S-3 (File No. 333-199107), and shall have amended the IRA to provide that Purchaser's registration rights thereunder shall survive until the earlier of (i) [***] or (ii) such time as Rule 144 or another similar exemption under the Securities Act is available for the sale of all of Purchaser's Shares during a three-month period without registration and without breach of the restrictions set forth in this Agreement (and assuming for the purposes of Rule 144 that Purchaser is subject to the volume limitations thereof as if Purchaser were an "affiliate" within the meaning of Rule 144).

8. MISCELLANEOUS.

8.1 **Waivers and Amendments.** Any term of this Agreement may be amended and the observance of any term of this Agreement may be waived (either generally or in a particular instance and either retroactively or prospectively), only with the written consent of both the Company and the Purchaser.

8.2 **Severability.** If one or more provisions of this Agreement are held to be unenforceable under applicable law, such provision(s) shall be excluded from this Agreement and the balance of the Agreement shall be interpreted as if such provision(s) were so excluded and shall be enforceable in accordance with its terms.

8.3 **Governing Law.** This Agreement shall be governed by and construed in accordance with the laws of the State of Delaware, without regard to conflicts of law principles.

8.4 **Counterparts.** This Agreement may be executed in two or more counterparts, each of which shall be deemed an original document, and all of which, together with this writing, shall be deemed one instrument. Facsimile and electronic (PDF) signatures shall be as effective as original signatures.

8.5 **Successors and Assigns.** Except as expressly provided hereunder, neither this Agreement nor any rights or obligations hereunder may be assigned or otherwise transferred by either party without the prior written consent of the other party; *provided, however*, that either party may assign this Agreement and its rights and obligations hereunder without the other party's consent:

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(a) in connection with the transfer or sale of all or substantially all of the business of such party to which the License Agreement relates to a third party, whether by merger, sale of stock, sale of assets or otherwise; or

(b) to an Affiliate, provided that the assigning party shall remain liable and responsible to the non-assigning party hereto for the performance and observance of all such duties and obligations by such Affiliate.

The rights and obligations of the parties under this Agreement shall be binding upon and inure to the benefit of the successors and permitted assigns of the parties. Any assignment not in accordance with this Agreement shall be void.

8.6 **Entire Agreement.** This Agreement and the other documents referred to herein constitute the entire agreement among the parties and no party shall be liable or bound to any other party in any manner by any warranties, representations, or covenants except as specifically set forth herein or therein.

8.7 **Payment of Fees and Expenses.** Except as set forth in Section 7.6 of this Agreement, each of the Company and the Purchaser shall bear its own expenses and legal fees incurred on its behalf with respect to this Agreement and the transactions contemplated hereby. If any action at law or in equity is necessary to enforce or interpret the terms of this Agreement, the prevailing party shall be entitled to reasonable attorney's fees, costs and necessary disbursements in addition to any other relief to which such party may be entitled.

8.8 **Broker's Fee.** Each of the Company and the Purchaser hereby represents that there are no brokers or finders entitled to compensation in connection with the sale of the Shares, and each party shall indemnify the other party for any such fees for which such party is responsible.

8.9 **Notices.** All notices required or permitted hereunder shall be in writing and shall be deemed effectively given: (i) upon personal delivery to the party to be notified; (ii) seven (7) calendar days after having been sent by registered or certified mail, return receipt requested, postage prepaid; or (iii) two (2) business days after deposit with a nationally recognized overnight courier with written verification of receipt. All communications shall be sent to the other party hereto at the mailing address set forth below, or at such other mailing address as such party may designate by ten (10) days' advance written notice to the other party hereto.

(a) If to the Company, notices shall be addressed to:

Fate Therapeutics, Inc.
3535 General Atomics Court, Suite 200
San Diego, California, 92121, USA
Attention: Chief Operating Officer

(b) If to the Purchaser, notices shall be addressed to:

Juno Therapeutics, Inc.

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307 Westlake Avenue North, Suite 300
Seattle, Washington, 98109, USA
Attention: General Counsel

With respect to the Election Notice and Extension Notice, such notices shall also be sent by e-mail on the date of such notices. In the case of the Election Notice, the Company shall send such notice by e-mail to the Purchaser's then current Chief Financial Officer and then current General Counsel. In the case of the Extension Notice, the Purchaser shall send such notices by e-mail to the Company's then current Chief Operating Officer. Such notices shall be deemed received by the Purchaser or the Company, as applicable, upon receipt of such e-mails (whether or not such e-mail is checked or read by the recipient) by such persons for purposes of determining the date of delivery of such notices hereunder. Concurrently with the execution of this Agreement, the Purchaser has provided the Company with the e-mail addresses of its current Chief Financial Officer and its current General Counsel, and the Company has provided the Purchaser with the e-mail address of its current Chief Operating Officer. Each party covenants to promptly update the other of changes in these positions and e-mail addresses.

8.10 **Headings.** The headings of the various sections of this Agreement have been inserted for convenience of reference only and shall not be deemed to be part of this Agreement.

8.11 **Disclaimer**. EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT AND THE LICENSE AGREEMENT, NEITHER PARTY MAKES ANY REPRESENTATION OR WARRANTY TO THE OTHER PARTY OF ANY NATURE, EXPRESS OR IMPLIED.

8.12 **Limitation of Liability**. NEITHER PARTY SHALL BE ENTITLED TO RECOVER FROM THE OTHER PARTY ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL OR PUNITIVE DAMAGES IN CONNECTION WITH THIS AGREEMENT.

[SIGNATURE PAGE TO FOLLOW]

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IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their duly authorized representatives as of the day and year first above written.

FATE THERAPEUTICS, INC.

By: /s/ J. Scott Wolchko

Name: Scott Wolchko

Title: COO/CFO

JUNO THERAPEUTICS, INC.

By: /s/ H. Bishop

Name: H. Bishop

Title: C.E.O.

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Exhibit 10.1

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 UNDER RULE 24b-2 OF THE SECURITIES EXCHANGE ACT OF 1934.

COLLABORATION AND LICENSE AGREEMENT

This COLLABORATION AND LICENSE AGREEMENT (the "Agreement"), effective as of May 4, 2015 (the "Effective Date"), is made by and between Fate Therapeutics, Inc., a Delaware corporation, having a principal place of business at 3535 General Atomics Court, Suite 200, San Diego, CA 92121 ("Fate"), and Juno Therapeutics, Inc., a Delaware corporation, having a place of business at 307 Westlake Ave N, 300, Seattle, WA 98109 ("Juno").

BACKGROUND

A. Juno has skills, expertise and proprietary technology regarding engineered T-cell immunotherapies using chimeric antigen receptor ("CAR") technology and T-cell receptor ("TCR") technology.

B. Fate has skills, expertise and proprietary technology regarding pharmacologically-modulated hematopoietic cell therapeutics, including hematopoietic stem cell and T-cell therapeutics, and its small molecule modulation platform.

C. Juno and Fate desire to enter a collaboration wherein Juno will select certain antigen targets and Fate will utilize its small molecule modulation platform, with the goal of developing engineered T-cells that would utilize or incorporate the results of such collaboration.

NOW, THEREFORE, for and in consideration of the covenants, conditions and undertakings hereinafter set forth, it is agreed by and between the Parties as follows:

ARTICLE 1
DEFINITIONS

As used herein, the following terms will have the meanings set forth below:

1.1 "Affiliate" shall mean any corporation or other entity, whether *de jure* or *de facto*, which is directly or indirectly controlling, controlled by or under common control of a Party hereto for so long as such control exists. For the purposes of this Section, "control" shall mean the direct or indirect ownership of at least fifty percent (50%) of the outstanding shares or other voting rights of the subject entity having the power to vote on or direct the affairs of the entity, or if not meeting the preceding, the maximum voting right that may be held by the particular Party under the laws of the country where such entity exists.

1.2 "Change of Control" shall mean, with respect to a Party, a transaction or series of transactions pursuant to which a Third Party (a) acquires (whether by merger, consolidation or transfer or issuance of capital stock or otherwise) beneficial ownership, directly or indirectly, of more than fifty percent (50%) of such Party's then outstanding voting securities, or (b) acquires all or substantially all of the assets of such Party; but excluding any such transaction or series of

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transactions described in clause (a) or (b) in which, immediately after the consummation of such transaction or series of transactions, the holders of voting securities of such Party immediately prior to such transaction or series of transactions beneficially own, directly or indirectly, more than fifty percent (50%) of the outstanding voting securities of the successor entity (or the parent of such successor entity) in such transaction.

1.3 "Collaboration IP" shall mean, collectively, the Collaboration Patents and Collaboration Know-How.

1.4 "Collaboration Know-How" shall mean all ideas, inventions, data, instructions, processes, formulas, expert opinions and information, including biological, chemical, pharmacological, toxicological, pharmaceutical, physical and analytical, clinical, safety, manufacturing and quality control data and information developed solely or jointly by Fate and/or Juno in the course of performing the Research Program.

1.5 "Collaboration Patents" shall mean all U.S. and foreign (a) patent applications, including provisional applications, the subject of which is an invention conceived or reduced to practice solely or jointly by Fate and/or Juno in the course of performing the Research Program, (b) any divisionals, continuations, and continuations-in-part of any of the foregoing, (c) all patents that issue as a result of any of the foregoing, including inventor's certificates and equivalents, and (d) all reissues, reexaminations, extensions or other governmental actions which extend any of the subject matter of the patents in clause (c) above, and any substitutions, additions, renewals, term restorations, requests for continued examination, revisions, supplementary protection certificates, confirmations, registrations or revalidations of any of the foregoing.

1.6 "[***]Efforts" shall mean [***].

1.7 "Combination Product" means a product that contains one or more active components which are Modulated Products, and sold in combination with one or more separate products which are not Modulated Products.

1.8 "Confidential Information" shall have the meaning set forth in Section 9.1.

1.9 "Control," "Controls," "Controlled" or "Controlling" shall mean possession of the ability to grant the licenses and/or sublicenses as provided herein without violating the terms of any agreement or other arrangements with any Third Party.

1.10 "Derivative" shall mean any of the following: (a) a modified form of a compound that is derived from such compound with modifications considered routine by an ordinary skilled chemist and generally conserves the basic scaffold of such compound's chemical structure; or (b) a salt, free-base, hydrate, solvate, polymorph, isomer, enantiomer, (human) metabolite or human prodrug (including ester prodrugs) of a compound.

1.11 "EMA" shall mean the European Medicines Agency of the European Union, or the successor thereto.

1.12 "Engineered T-Cell" shall mean a T-cell, normally having the ability to recognize specific peptide antigens presented by the major histocompatibility complex through receptors on

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their cell surface, that has been genetically engineered to express either a CAR or a TCR with the express intent of targeting a tumor associated antigen or protein; provided, however, that notwithstanding the foregoing, the definition of "Engineered T-Cell" specifically excludes the following cell types: [***]. For the avoidance of doubt, a pharmaceutical product incorporating a T-cell will not be excluded by virtue of the exclusions in [***].

1.13 "Excluded Modulator" shall mean a Modulator that (i) [***], and (ii) [***]. Notwithstanding the foregoing, a Modulator which is an Excluded Modulator pursuant to this Section 1.13, will be a "Partially Excluded Modulator" (and will be considered a Partially Excluded Modulator, and not an Excluded Modulator, only for purposes of determining which of Section 5.9.1 or 5.9.2 or Section 5.9.3 or 5.9.4 applies) if [***]. For the avoidance of doubt, under this Section 1.13, a Fate Modulator shall not be considered an Excluded Modulator or Partially Excluded Modulator if the applicable [***].

1.14 "Fate Collaboration IP" shall mean the Collaboration IP that is solely owned by Fate in accordance with Section 8.1. The "Fate Collaboration Patents" shall mean the Collaboration Patents that are solely owned by Fate in accordance with Section 8.1.

1.15 "Fate IP" shall mean, collectively, the Fate Patents and Fate Know-How.

1.16 "Fate Know-How" shall mean all ideas, inventions, data, instructions, processes, formulas, expert opinions and information, including biological, chemical, pharmacological, toxicological, pharmaceutical, physical and analytical, clinical, safety, manufacturing and quality control data and information, which are (a) Controlled by Fate or its Affiliates at any time during the term of this Agreement (except as expressly excluded pursuant to Section 5.8) and (b) necessary or useful either (i) for Juno to perform its activities under the Research Program or (ii) to make, have made, use, offer for sale, sell, import, export and otherwise exploit Modulated Products incorporating as an active ingredient an Engineered T-Cell directed against Selected Target(s) in the Territory for use in the Field; provided, however, that the foregoing definition excludes all intellectual property rights Controlled by any Affiliate that becomes an Affiliate of Fate in connection with or following a Change of Control of Fate, unless and until such Affiliate performs any activities under the Research Program or receives an assignment of any of the foregoing intellectual property rights within this definition from Fate or any Affiliate of Fate that is not excluded by virtue of this proviso.

1.17 "Fate Modulators" shall mean (a) Modulators identified by Fate, disclosed to Juno by Fate, and assessed by Fate or Juno with respect to their potential to enhance the therapeutic properties of Engineered T-Cells in connection with the Research Program; (b) Derivatives of Modulators described in Section 1.17(a); and (c) substitutes of Modulators described in Section 1.17(a), where a compound is considered a substitute of a Modulator if: [***].

1.18 "Fate Patents" shall mean all U.S. and foreign patents and patent applications, including any divisionals, continuations, continuations-in-part, inventor's certificates and equivalents, reissues, reexaminations, extensions or other governmental actions which extend any of the subject matter of any such patents, substitutions, additions, renewals, term restorations, requests for continued examination, revisions, supplementary protection certificates, confirmations, registrations or revalidations of any such patents or patent applications, which are (a) Controlled by

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Fate or its Affiliates at any time during the term of this Agreement (except as expressly excluded pursuant to Section 5.8) and (b) necessary or useful either (i) for Juno to perform its activities under the Research Program or (ii) to make, have made, use, offer for sale, sell, import, export and otherwise exploit Modulated Products incorporating as an active ingredient an Engineered T-Cell directed against Selected Target(s) in the Territory for use in the Field; provided, however, that the foregoing definition excludes all intellectual property rights Controlled by any Affiliate that becomes an Affiliate of Fate in connection with or following a Change of Control of Fate, unless and until such Affiliate performs any activities under the Research Program or receives an assignment of any of the foregoing intellectual property rights within this definition from Fate or any Affiliate of Fate that is not excluded by virtue of this proviso.

1.19 "FDA" shall mean the Food and Drug Administration of the United States, or the successor thereto.

1.20 "Field" shall mean the diagnosis, treatment or prevention of any human disease or condition.

1.21 "FTE" shall mean a full-time, equivalent person year, based upon a total of[***] hours per year of work in connection with the Research Program.

1.22 "IND" shall mean an investigational new drug application filed with the FDA as more fully defined in 21 C.F.R. § 312.3.

1.23 "Joint Collaboration IP" shall mean the Collaboration IP that is jointly owned by Fate and Juno in accordance with Section 8.1. The "Joint Collaboration Patents" shall mean the Collaboration Patents that are jointly owned by Fate and Juno in accordance with Section 8.1.

1.24 "JRC" or "Joint Research Committee" shall have the meaning set forth in Section 3.1.

1.25 "Juno Collaboration IP" shall mean the Collaboration IP that is solely owned by Juno in accordance with Section 8.1. The "Juno Collaboration Patents" shall mean the Collaboration Patents that are solely owned by Juno in accordance with Section 8.1.

1.26 "License" shall mean the license grant set forth in Section 4.1.

1.27 "Modulated Product" shall mean (a) a Product that uses or incorporates a Fate Modulator, or (b) a pharmaceutical product, other than a Product, that uses or incorporates a Fate Modulator and [***].

1.28 "Modulator" shall mean any pharmacologic small molecule that can enhance the therapeutic properties of Engineered T-Cells.

1.29 "Net Sales" shall mean, with respect to any Modulated Product, the gross sales price of such Modulated Product invoiced by Juno, its Affiliates and/or sublicensees to Third Parties who are not Affiliates or sublicensees (or are Affiliates or sublicensees but are the end users of such Modulated Product) less, to the extent actually paid by Juno or its Affiliates or sublicensees (as applicable), (a) credits or allowances granted for billing errors, damaged, outdated, returned, rejected or recalled Modulated Products, (b) trade, quantity discounts, early payment, and/or early payment

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cash discounts, rebates and other price reductions for such Modulated Product given to such Third Parties under price reduction programs, (c) rebates to, and chargebacks from the account of, such customers for nonconforming, damaged, out-dated and returned Modulated Product, (d) transportation and insurance, (e) sales, use, value-added and other direct taxes incurred on the sale of such Modulated Product to such customers, and (f) customs duties, tariffs, surcharges and other governmental charges incurred in exporting or importing such Modulated Product to such customers; or to the extent actually accrued by Juno or its Affiliates or sublicensees (as applicable), an allowance for uncollectible or bad debts determined in accordance with U.S. GAAP.

For the avoidance of doubt, disposal of any Modulated Product, or use of any Modulated Product,(i) for or in any clinical trial or other research and development activities without charge, or (ii) provided without charge as samples or for compassionate use, if any, shall not result in any Net Sales.

For clarity, if Juno sells Modulated Product to an Affiliates or sublicensees for resale, Net Sales shall be determined based on the amount received by such Affiliates or sublicensees from Third Parties on the resale of such Modulated Product rather than the amount received by Juno on the sale of Modulated Product to its Affiliates or sublicensees for resale.

With respect to Modulated Products, if any, that are sold at a discount in "bundles" with other products or services (i.e., sold together in a single sales transaction with other products or services for which separate prices are charged in such transaction), if the amount invoiced for the applicable Modulated Products represents [***] then Net Sales for such "bundled" Modulated Product shall be determined using [***].

If a Modulated Product is sold as a Combination Product, then for purposes of calculating Juno's payment obligations under Section 5.7, shall be determined as follows:

(A) In the event one or more Modulated Products are sold as part of a Combination Product in a particular country, and all products contained in the Combination Product are sold separately in such country, the Net Sales of such Modulated Product(s), for the purposes of determining payments based on Net Sales, shall be determined by [***]

(B) In the event one or more Modulated Products are sold as part of a Combination Product and are sold separately in such country, but the other product(s) included in the Combination Product are not sold separately in such country, the Net Sales of the Modulated Product, for the purposes of determining payments based on Net Sales, shall be determined by [***]

(C) In the event that the Net Sales of the Modulated Product(s) when included in a Combination Product cannot be determined using the methods above, Net Sales for the purposes of determining payments based on Net Sales shall be [***].

1.30 "Party" or "Parties" shall mean, respectively, Fate or Juno individually, or Fate and Juno collectively.

1.31 "Product" shall mean any pharmaceutical product incorporating as an active ingredient an Engineered T-Cell directed against Selected Target(s).

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1.32 "Registration(s)" shall mean any and all permits, licenses, authorizations, registrations or regulatory approvals (including a New Drug Application (with respect to the FDA) or Marketing Authorization Application (with respect to the EMA)) required as a prerequisite to the development, manufacturing, packaging, marketing and selling of any product.

1.33 "Regulatory Authority" means any applicable government or quasi-government regulatory authority involved in granting approvals for investigational clinical trials, the manufacturing, marketing, selling, reimbursement and/or pricing of a Modulated Product in the Territory, including, in the U.S., the FDA and, in other countries, any governmental authority having substantially the same function.

1.34 "Research Plan" shall mean the written research plan governing the efforts of the Parties in conducting the Research Program. Attached hereto as Exhibit A is the preliminary outline of the Research Plan, with the full Research Plan to be agreed to by the Parties within thirty (30) days after the Effective Date. The Research Plan may be amended from time to time by mutual agreement of the Parties or as described in Section 2.3.

1.35 "Research Program" shall mean the research activities undertaken by the Parties pursuant to ARTICLE 2 below.

1.36 "Research Term" shall mean the term of the Research Program, as provided in Section 2.5 below.

1.37 "Results" shall mean the data and results generated in the course of the Research Program.

1.38 "Royalty Term" shall mean, with respect to each Modulated Product in each country, the term commencing on the first commercial sale of the Modulated Product in such country and continuing until the later of (a) expiration of the last Valid Claim in such country covering the manufacture, use, offer for sale, sale or import of such Modulated Product (or any Fate Modulator used or incorporated therein) in such country, (b) ten (10) years after such first commercial sale in such country, or (c) the expiration of all data and other regulatory exclusivity periods afforded by any Regulatory Authority with respect to such Modulated Product in such country.

1.39 "SEC" shall mean the U.S. Securities and Exchange Commission or any successor agency.

1.40 "Selected Target" shall mean a Target selected by Juno in accordance with Section 2.8.

1.41 "Stock Purchase Agreement" shall have the meaning set forth in Section 5.1.

1.42 "Tail Period" shall have the meaning set forth in Section 4.3(d).

1.43 "Target" shall mean (a) any of the tumor-associated antigens and proteins listed on Exhibit B, as such list may be amended in accordance with Section 2.7 (the "Target List"), and (b) any variant, isoform or polymorphism of any such antigen or protein on the Target List.

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1.44 "Territory" shall mean worldwide.

1.45 "Third Party" shall mean any person or entity other than Fate and Juno, and their respective Affiliates.

1.46 "Valid Claim" shall mean a claim of an issued and unexpired patent, or a patent application being prosecuted in good faith that has been pending for no more than [***] years from the date of earliest priority, that is included within the Fate Patents or Collaboration Patents, as applicable, which has not been held permanently revoked, 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 been irretrievably cancelled, withdrawn, abandoned or rejected.

ARTICLE 2
RESEARCH PROGRAM

2.1 Goals. The goals of the Research Program are the discovery and identification of Fate Modulators, and the optimization and the use of Fate Modulators, to research and develop Modulated Products pursuant to the Research Plan. Without limiting the foregoing, under the Research Plan (a) Fate shall use its small molecule library to identify Modulators that promote the selected T-cell characteristics for modification, (b) Fate shall primarily be responsible for *in vitro* validation and *in vivo* confirmation of the selected T-cell characteristics for modification (e.g., T-cell survival, T-cell trafficking) using Fate Modulators on the transferred T-cell populations, and (c) Juno shall primarily be responsible for *in vivo* efficacy assessments using Engineered T-Cells, which have been pharmacologically-modulated with Fate Modulators, targeting a Target.

2.2 Conduct of the Research Program. Subject to the terms and conditions set forth herein, the Parties shall conduct research under the Research Program, which shall be funded as set forth in Section 5.3. During the Research Term, Fate and Juno shall collaborate and conduct the Research Program in accordance with the Research Plan, and the budget included therein, within the time schedules contemplated therein and keep the other Party informed as to the progress and Results of the Research Program hereunder. Fate and Juno shall each perform their respective obligations under the Research Plan. For clarification, Fate shall not be obligated to perform research under the Research Program that is not within the then-current budget included in the Research Plan, which budget shall not exceed amounts payable to Fate under Section 5.3, unless all costs of such research are to be paid for solely by Juno.

2.3 Research Plan. The Research Program shall be carried out in accordance with a mutually agreed upon written Research Plan, which shall establish specific research objectives and the research tasks to be performed and resources to be provided by each Party and the budget for such activities. The Parties shall work together in good faith to prepare the initial draft Research Plan, and a detailed Research Plan shall be agreed to by the Parties within thirty (30) days after the Effective Date and attached hereto as Exhibit A. The Research Plan will establish the scope of the research activities which will be performed and the research objectives and work plan activities with

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respect to the Research Program and the budget for such activities. The Research Plan shall be reviewed on an ongoing basis and may be amended by the Joint Research Committee in accordance with ARTICLE 3. Notwithstanding the governance provisions of Section 3.5, if a Fate Modulator to be used under the Research Program is an Excluded Modulator, then Juno shall only include the use of such Excluded Modulator, and Fate shall only be required to conduct activities on such Excluded Modulator, under the Research Program if both Parties agree to specific research and development tasks and objectives that are designed, with a good faith intent, to result in a Modulated Product that would qualify for payments under Sections 5.5, 5.6 and 5.7 (and not excluded from payments under Section 5.9); provided that [***].

2.4 Research Program Staffing. During the Research Program, Fate and Juno shall each devote that number of FTEs and other resources to conduct the Research Program as specified in the Research Plan.

2.5 Term of Research Program. The term of the Research Program shall commence on the Effective Date and shall end upon the date four (4) years after the Effective Date (the "Initial Research Term"), provided that if Juno exercises the Extension Option as set forth below, then the term of the Research Program shall be extended for an additional two (2) years (the "Extended Research Term") (the Initial Research Term together with the Extended Research Term, if applicable, the "Research Term"). If, during the Initial Research Term, Juno has selected at least [***] Selected Targets, then upon providing written notice to Fate at least [***] prior, but no more than [***] prior, to the expiration of the Initial Research Term and making the payments both as described in Section 5.2, the term of the Research Program shall be extended by the Extended Research Term (the "Extension Option").

2.6 Records; Inspection.

(a) Records. Fate and Juno shall maintain records of the Research Program (or cause such records to be maintained) in sufficient detail and in good scientific manner as will properly reflect all work done and Results achieved in the performance of the Research Program (including all data in the form required under any applicable governmental regulations and as directed by the JRC). Fate shall maintain such records during the Research Term and for a period of [***] years thereafter, and shall provide Juno access to such records at Fate's place of business upon reasonable advance notice of Juno.

(b) Reports and Information Exchange. During the Research Term, each of Juno and Fate shall use [***] Efforts to disclose to the other Party all material information relating to the Research Program promptly after it is learned or its materiality is appreciated. Each Party shall also keep the other Party, including the Joint Research Committee, informed as to its progress under the Research Plan. Within [***] days following the end of each [***] of the Research Program, each of Fate and Juno shall provide the other Party with a reasonably detailed written report describing [***]. Fate shall use its [***] Efforts to identify and disclose to Juno the most suitable Modulators in connection with the Research Program.

2.7 Target List. During the Research Term, Juno shall have the right to update the Target List, on a [***] basis (or more frequently as provided below following receipt of a Target Notification), by providing an updated Target List to the JRC, provided that the Target List may not

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exceed [***]tumor-associated antigens or proteins at any one time. During the Research Term, if Fate desires, either directly or with an Affiliate or Third Party collaborator to research, develop, use or commercialize any Modulators for the purposes of modulating the therapeutic properties of Engineered T-Cells targeting a tumor-associated antigen or protein which is not on the Target List, then Fate shall first notify and disclose to Juno in writing the tumor-associated antigen or protein (the "Target Notification"). Juno shall have a period of [***] days from receipt of the Target Notification to elect to add such tumor-associated antigen or protein to the Target List (and, correspondingly, remove tumor-associated antigens or proteins from the Target List, if necessary, so that the Target List shall not exceed [***] Targets at any one time) by providing an updated Target List to the JRC. If Juno does not add such tumor-associated antigen or protein to the Target List during such [***] day period, or if Juno removes a tumor-associated antigen or protein from the Target List when providing an updated Target List (including, for the avoidance of doubt, in connection with any update of the Target List by Juno as described above) (in each case, such antigen or protein, together with any variant, isoform or polymorphism of any such antigen or protein (except for any variant, isoform or polymorphism that may be separately included on the Target List), a "Declined Target"), Fate shall not have any obligations or restrictions, and Juno shall not have any rights, under this Agreement thereafter with respect to any Declined Target. A Declined Target [***]. At the end of the Research Term, all Targets on the Target List that have not been selected as Selected Targets in accordance with Section 2.8 shall automatically be deemed Declined Targets.

2.8 Selected Targets. During the Research Term, subject to the terms of this Section 2.8, Juno shall have the right to select Targets to be Selected Targets by providing written notice to Fate and payment of the payment set forth in Section 5.4. Upon such written notice and payment for a given Target, such Target shall be a "Selected Target." There shall not be any limit on the number of Selected Targets (other than the requirement that such Target was on the Target List); provided, however, that Juno shall only have the right to select a Target as a Selected Target if [***]. For clarification (i) if Juno [***] then each such antigen or protein shall be selected by Juno as a Selected Target in accordance with this Section 2.8 in connection with [***], and (ii) [***]. For the avoidance of doubt, Juno may modify an existing Modulated Product incorporating as an active ingredient an Engineered T-Cell directed against such Selected Target(s) by [***].

2.9 Technology Transfer. During the Research Term and, provided that Juno has selected at least one (1) Selected Target prior to the end of the Research Term in accordance with Section 2.8, for [***] months following the Research Term, upon the request of Juno, Fate shall provide reasonable assistance to enable the effective transfer to Juno or its Affiliates or its designees, without charge, such reasonable quantities of Fate Modulators (and associated Fate IP and Collaboration IP) as are in Fate's possession and are reasonably necessary to enable Juno or its designee (including a manufacturer) to continue to perform activities to be performed by Juno under this Agreement, and for the manufacture of the Fate Modulators to be used in a Modulated Product incorporating as an active ingredient an Engineered T-Cell directed against Selected Target(s). Thereafter Fate will reasonably cooperate as Juno may from time to time request to identify other parties from which to source Fate Modulators, at Juno's expense.

2.10 Transfer of Materials. In connection with the Research Program, each Party may transfer to the other Party certain materials, including Fate Modulators transferred to Juno by Fate and T-cell populations transferred to Fate by Juno (collectively, the "Materials"). Fate shall use the

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Materials provided by Juno, and Juno shall use the Materials provided by Fate, and any information and other materials directly or indirectly related or derived therefrom, solely to conduct the Research Program or, as applicable in the case of Juno, to exercise its license rights granted hereunder, and for no other purpose. Fate shall not use the Materials provided by Juno, and Juno shall not use Materials provided by Fate, or any information or other materials directly or indirectly related or derived therefrom, for any other purpose. Fate shall not transfer the Materials provided by Juno, and Juno shall not transfer the Materials provided by Fate, or any information or other materials directly or indirectly related or derived therefrom, to any Third Party without the prior express written consent of the Party providing such Materials, except that Juno shall have the right to transfer the information and materials to its manufacturers, collaborators or licensees, in each case pursuant to exercising the license rights granted hereunder (subject to Section 4.2 or 10.4(a)). Fate shall notify Juno, and Juno shall notify Fate, promptly upon discovery of any unauthorized use or disclosure of the Materials provided by such other Party. Upon the request of Juno, Fate promptly shall return all remaining Materials provided to Fate by Juno to Juno, or at the instruction of Juno destroy the Materials and provide to written evidence of such destruction. Except as expressly set forth herein, ALL MATERIALS ARE PROVIDED "AS IS" AND WITHOUT ANY REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR ANY PARTICULAR PURPOSE OR ANY WARRANTY THAT THE USE OF THE MATERIALS WILL NOT INFRINGE OR VIOLATE ANY PATENT OR OTHER PROPRIETARY RIGHTS OF ANY THIRD PARTY.

ARTICLE 3
MANAGEMENT

3.1 Joint Research Committee. Promptly after the Effective Date, Juno and Fate will establish a committee (the "Joint Research Committee" or "JRC") to oversee, review and recommend direction of the Research Program during the Research Term. The responsibilities of the Joint Research Committee shall include, among other things monitoring and reporting research progress and ensuring open and frequent exchange between the Parties regarding Research Program activities.

3.2 Membership. The JRC shall include two (2) representatives of each of Juno and Fate, each Party's members selected by that Party. Fate and Juno may each replace its JRC representatives at any time, upon written notice to the other Party. From time to time, the JRC may establish subcommittees, to oversee particular projects or activities, and such subcommittees will be constituted as the JRC agrees.

3.3 Meetings. During the Research Term, the JRC shall meet at least twice a year, or as agreed by the Parties, at such locations as the Parties agree, to share progress reports and will otherwise communicate regularly by telephone, electronic mail, facsimile and/or video conference. During the Research Term, the JRC shall meet twice a year, or as agreed by the Parties, at such locations as the Parties agree, to set research priorities and costs for the Research Program. With the consent of the Parties, other representatives of Fate or Juno may attend JRC meetings as nonvoting observers. Each Party shall be responsible for all of its own expenses associated with attendance of

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such meetings. The first meeting of the JRC shall occur within thirty (30) days after the Effective Date.

3.4 Minutes. The JRC shall keep accurate minutes of its deliberations which shall record all proposed decisions and all actions recommended or taken. The Secretary of the JRC (as appointed by the members of the JRC) shall be responsible for the preparation of draft minutes. Draft minutes shall be sent to all members of the JRC within [***] working days after each meeting and shall be approved, if appropriate, at the next meeting. All records of the JRC shall at all times be available to both Fate and Juno.

3.5 Decision Making. Decisions of the JRC shall be made by unanimous vote, with each Party having one (1) vote. In the event that there is not a unanimous vote to approve a decision, then Juno shall have the deciding vote; provided, however, that Juno, with such deciding vote, shall not (a) require Fate to incur any additional costs and/or expenses under the collaboration in excess of the amounts paid by Juno to Fate pursuant to Section 5.3 (unless such additional costs / expenses are to be paid for solely by Juno) or (b) make any decision that would amend the scope of the Research Program or the terms of this Agreement.

ARTICLE 4
LICENSES

4.1 License. Subject to the terms and conditions of this Agreement, in connection with selection by Juno of a Selected Target(s) in accordance with Section 2.8, Fate shall grant, and hereby does grant to Juno, effective upon such selection, an exclusive (even as to Fate, other than for activities to be conducted by Fate under this Agreement), royalty-bearing, non-transferable (except as set forth in Section 13.4) license, with the right to grant and authorize sublicenses through multiple tiers in accordance with Section 4.2, under the Fate IP, Fate Collaboration IP and Fate's interest in the Joint Collaboration IP applicable to Modulated Products incorporating as an active ingredient an Engineered T-Cell directed against Selected Target(s), solely to make, have made, use, offer for sale, sell, import, export and otherwise exploit Modulated Products incorporating as an active ingredient an Engineered T-Cell directed against Selected Target(s) in the Territory for use in the Field.

4.2 Sublicense Terms. Any sublicense by Juno of rights granted under the License shall be in writing and subject and subordinate to, and consistent with, the terms and conditions of this Agreement. Juno shall provide Fate a copy of any sublicense agreement entered into with any Third Party sublicensee, and any amendment thereto, within [***] days of its execution; provided that Juno may redact any confidential information contained therein that is not necessary to disclose to ensure compliance with this Agreement. Juno shall be liable for the failure of its sublicensees to comply with the relevant obligations under this Agreement and shall, at its own cost, enforce compliance by its sublicensees with the terms of the sublicense agreement.

4.3 Exclusivity.

(a) Research Term. During the Research Term: (i) except with respect to activities in connection with this Agreement or Fate's exercise of its rights under this Agreement,

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Fate shall not conduct or participate in, and shall not license, fund or otherwise enable any Third Party to, engage in any research, development or commercialization activities involving the use of any Modulators with respect to any Engineered T-Cell directed against one or more Targets, and (ii) except with respect to activities in connection with this Agreement or Juno's exercise of its rights under this Agreement, Juno shall not conduct or participate in, and shall not license, fund or otherwise enable any Third Party to, engage in any research, development or commercialization activities involving the use of any Fate Modulators for any purpose.

(b) Term of Agreement. At any time during the term of this Agreement following Juno's election to exercise the Extension Option (but not if Juno does not exercise the Extension Option), except with respect to activities in connection with this Agreement or Fate's exercise of its rights under this Agreement (including as permitted under Section 4.3(f)), Fate shall not conduct or participate in, and shall not license, fund or otherwise enable any Third Party to, engage in any research, development or commercialization activities involving the use of any Modulators with respect to an Engineered T-Cell directed against one or more Selected Targets.

(c) Conversion. On a Selected Target -by-Selected Target basis, if Juno fails to exercise its diligence obligations with respect to a Selected Target as set forth in ARTICLE 7, then (i) the License grant under Section 4.1 with respect to Modulated Products directed against such Selected Target shall convert from exclusive to non-exclusive, and (ii) Fate's restrictions under Section 4.3(b) with respect to such Selected Target shall terminate.

(d) Jointly Owned Collaboration IP. During the Research Term and the Tail Period (as defined below), Fate shall not grant a license under, or enable any Third Party with respect to, Fate's interest in any Joint Collaboration IP for any Engineered T-Cell directed against a Target. The "Tail Period" shall mean (i) [***] after expiration of the Research Term if Juno has exercised the Extension Option, or (ii) [***] after expiration of the Research Term if Juno has not exercised the Extension Option; provided, however, if Juno terminates the Agreement during the Research Term pursuant to Section 12.3, then the Tail Period shall mean the period expiring on the effective date of termination of the Research Term under Section 12.3.

(e) Option. Subject to Juno's exercise of the Extension Option and provided that Juno does not terminate this Agreement during the Research Term pursuant to Section 12.3, Fate hereby grants to Juno during the [***] period after the expiration of the Research Term (the "Option Period"), solely with respect to those Targets on the Target List as of the expiration of the Research Term, an option (the "Option") with respect to any [***] to include such [***] as a Selected Target under the licenses granted under Section 4.1. If Juno desires to exercise the Option with respect to a particular Target during the Option Period, Juno shall provide written notice to Fate identifying the applicable Target (the "Option Notice"). Within [***] days after receipt of the Option Notice, Fate shall notify Juno in writing whether the Target is an [***]. If such applicable Target is [***], Juno shall have the right to exercise the Option during the Option Period by providing written notice to Fate of exercise of the Option and paying the selection fee under Section 5.4 as if such Target was the next Selected Target. Effective upon receipt of such notice and payment, the Option for the applicable Target shall be exercised and the Target shall be deemed a "Selected Target" for all purposes under this Agreement (including the rights granted under Section 4.1 and payment obligations for applicable Modulated Products under ARTICLE 5). As used herein [***].

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(f) Acknowledgement. It is acknowledged that conducting or participating in, or licensing, funding or otherwise enabling any Third Party to, engage in any research, development or commercialization activities directed against one or more antigens or proteins that are not Targets, including where there may be incidental activity against a Target but it is not the intended purpose of such activities to target such Target, shall not be a violation of this provision.

4.4 Limitations and Other Restrictions. During the Research Term [***]. Following the expiration of the Research Term, [***].

4.5 Use of Joint Collaboration IP. During the term and thereafter, subject to the License and the provisions of Section 4.3 and ARTICLE 9, each party shall have the right to use, or license to any Third Party, any of its joint ownership interest in the Joint Collaboration IP for any purpose. Except as expressly provided in this Agreement, neither Party shall have any obligation to account to the other for profits, or to obtain any approval of the other Party to license or exploit jointly-owned inventions and other intellectual property, by reason of joint ownership thereof, and each Party hereby waives any right it may have under the laws of any jurisdiction to require any such consent or accounting.

4.6 Use of Results. During the term and thereafter, subject to the License and the provisions of Section 4.3, Section 8.1(b) and ARTICLE 9, each party shall have the right to use and disclose the Results for any purpose.

4.7 No Implied Licenses; Retained Rights. No right or license under any intellectual property rights of either Party is granted or shall be granted by implication. All such rights or licenses are or shall be granted only as expressly provided in the terms of this Agreement. Fate hereby expressly reserves all rights under the Fate IP, Fate Collaboration IP and Fate's interest in the Joint Collaboration IP not expressly licensed to Juno under the License.

4.8 Development Reports. Following the Research Term, Juno shall deliver to Fate written annual updates with respect to the status of the development of Modulated Products, which shall include initiation of any clinical trials, the status of progress toward achievement of milestone events and termination of development of any Modulated Product.

ARTICLE 5
PAYMENTS

5.1 Initial Fee. In partial consideration of Fate's grant of the rights and licenses to Juno hereunder, Juno shall (a) pay to Fate a one-time, non-refundable, non-creditable fee of five million dollars ($5,000,000) within [***] following the Effective Date, and (b) purchase eight million dollars ($8,000,000) worth of shares of Fate's common stock at a price of eight dollars ($8.00) per share pursuant to the stock purchase agreement attached hereto as Exhibit C (the "Stock Purchase Agreement").

5.2 Extension Option Fee. If Juno exercises the Extension Option in accordance with Section 2.5, then (a) Juno shall pay to Fate a one-time, non-refundable, non-creditable fee of three million dollars ($3,000,000) within ten (10) days following Juno's written notice of exercise of the

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Extension Option, and (b) upon Fate's written election provided within [***] following Juno's exercise of the Extension Option, Juno shall purchase the Extension Closing Shares (as defined in the Stock Purchase Agreement), subject to the terms and conditions of the Stock Purchase Agreement.

5.3 Research Program Funding. As consideration for Fate's performance of its activities under the Research Program, Juno will pay to Fate amounts as determined by the JRC and set forth in the budget included in the Research Plan; provided, however, that the minimum amount to be paid to Fate shall be equal to two million dollars ($2,000,000) per year during the Initial Research Term; provided, however, if Juno exercises the Extension Option in accordance with Section 2.5, such minimum amount to be paid by Juno to Fate shall be equal to four million dollars ($4,000,000) per year during the Extended Research Term. Amounts payable to Fate under this Section 5.3 shall be paid [***], based on the applicable amount of funding set forth in the then-current budget as determined by the JRC but not less than the minimum amount set forth above.

5.4 Selection Fee. Within [***] days after each Selected Target is first selected by Juno pursuant to Section 2.8, Juno shall pay to Fate a one-time, non-refundable, non-creditable selection fee for such Selected Target, as follows: (a) for each of the first [***] Selected Targets: [***] per Selected Target, (b) for each of the [***] through [***] Selected Targets: [***] per Selected Target, and (c) for each subsequent Selected Target commencing with the [***] Selected Target: [***] per Selected Target. In addition to the foregoing, Juno shall pay to Fate within [***] days after each of the following events: (a) a one-time, non-refundable, non-creditable bonus of [***] upon the selection of the first [***] Selected Targets, and (b) a one-time, non-refundable, non-creditable bonus of [***] upon the selection of the first [***] Selected Targets.

5.5 Milestones. Juno shall pay Fate the following payments on the first achievement by Juno or any of its Affiliates or sublicensees of the following milestone events, with such payments due within [***] days after the applicable event occurs. Each milestone payment shall be non-refundable and non-creditable (other than as set forth in Section 5.5.3 below), and due one-time only for each Modulated Product. For purposes of this Section 5.5 and Section 5.6 below, the following shall apply to determine whether a Modulated Product is separate and distinct from another Modulated Product so that milestone payments shall be due for each such Modulated Product.

5.5.1 For a pharmaceutical product that is an Engineered T-Cell, a Modulated Product shall be considered separate and distinct from an existing Modulated Product if [***]. For the avoidance of doubt, a Modulated Product shall not be considered separate and distinct from an existing Modulated Product [***].

5.5.2 For a pharmaceutical product that is not an Engineered T Cell, a Modulated Product shall be considered a separate and distinct Modulated Product if such Modulated Product has [***].

5.5.3 Notwithstanding the foregoing, each Modulated Product that enters clinical investigation in a clinical trial which is intended to support Registration, shall be considered a separate and distinct Modulated Product and any and all Milestone Payments related to such Modulated Product, including those previously unpaid, shall be payable

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hereunder; provided however that, if all development of a Modulated Product is ceased ("Discontinued Product"), [***].

Milestone Event		Milestone Payment
[***]	$	[***]
[***]	$	[***]
[***]	$	[***]
[***]	$	[***]
[***]	$	[***]
[***]	$	[***]
[***]	$	[***]
[***]	$	[***]
[***]	$	[***]

* An indication will be considered different than another indication if separate IND filings are required for each such indication.

The milestone payments based upon Net Sales shall be additive so that if more than one such milestone events are achieved in the same year, then all milestone payments corresponding with such milestone events shall be paid.

5.6 Bonus Milestones. In addition to those payments due under Section 5.5, Juno shall pay Fate the following payments on the first achievement by Juno or its Affiliate or sublicensee of the following milestone events, with such payments due within [***] days after the applicable event occurs. Each milestone payment shall non-refundable and non-creditable, and be due one-time only.

Milestone Event		Milestone Payment
[***]	$	[***]
[***]	$	[***]
[***]	$	[***]
[***]	$	[***]

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Milestone Event		Milestone Payment
[***]	$	[***]
[***]	$	[***]
[***]	$	[***]
[***]	$	[***]
[***]	$	[***]
[***]	$	[***]
[***]	$	[***]
[***]	$	[***]
[***]	$	[***]
[***]	$	[***]

The milestone payments based upon Net Sales shall be additive so that if more than one such milestone events are achieved in the same year, then all milestone payments corresponding with such milestone events shall be paid.

5.7 Royalties.

(a) During the Royalty Term for a Modulated Product, Juno shall pay Fate, [***] a royalty equal to [***] of Net Sales of Modulated Product. If, with respect to Net Sales of all Modulated Products during a calendar year, and evaluated each calendar year, aggregate Net Sales during such calendar year exceeded [***] then the foregoing royalty rate shall be [***] for such calendar year to [***] unless [***] gross profit margin for Modulated Products (determined in accordance with U.S. GAAP) for such calendar year is [***].

(b) Only one royalty shall be paid to Fate with respect to each Modulated Product subject to royalties under this Section, without regard to whether more than one Valid Claim is applicable to such Modulated Product.

(c) If, with respect to Net Sales of a Modulated Product during a calendar year, [***] and if it becomes necessary for Juno, its Affiliates or sublicensees to obtain a license under a patent of a Third Party in order to practice the License to manufacture, use or sell such Modulated Product in a given country, then Juno shall have the right to credit [***] of such Third Party royalty payments against the royalties owing to Fate under Section 5.7(a) with respect to sales of such Modulated Product in such country; provided, however, that Juno shall not reduce the amount of the

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royalties paid to Fate under Section 5.7(a) with respect to such Modulated Product in such country by reason of this Section to an effective royalty rate of less than [***].

5.8 Upstream Agreements. Juno acknowledges that certain Fate IP included in the License may include intellectual property that is licensed to Fate pursuant to an agreement with a Third Party ("Fate Upstream Agreement"). As of the Effective Date, there are no Fate Upstream Agreements. Fate Upstream Agreements may be added to Exhibit E as described below. Juno agrees to be bound by any restrictions or limitations set forth in the Fate Upstream Agreements that applies to Juno's use of the applicable Fate IP, including any limitations on the scope and exclusivity of the licenses granted to Fate thereunder and any constraints on Fate's ability to prosecute or enforce intellectual property licensed pursuant to such Fate Upstream Agreement, and that any sublicense granted under Fate Upstream Agreements is granted subject to the terms and conditions of such Fate Upstream Agreements. Fate shall remain responsible for all payments that may be due under each Fate Upstream Agreement; provided, however, that Juno shall reimburse Fate, within [***] days after the date of an invoice from Fate, for [***] under any Fate Upstream Agreement entered into and added to Exhibit E after the Effective Date in connection with the activities of Juno and its Affiliates and sublicensees. Notwithstanding the foregoing, an agreement will only be added to Exhibit E after the Effective Date if Fate provides Juno a copy of such license agreement, and Juno elects to amend Exhibit E to include such license agreement as a Fate Upstream Agreement; provided, however, that Fate shall provide Juno a copy of any license agreement entered into after the Effective Date that is necessary or useful either (i) for Juno to perform its activities under the Research Program or (ii) to make, have made, use, offer for sale, sell, import, export and otherwise exploit Modulated Products incorporating as an active ingredient an Engineered T-Cell directed against Selected Target(s). If the Parties do not amend Exhibit E to include such license agreement within [***] days after Fate first provides such license agreement to Juno, then such license agreement shall not be a Fate Upstream Agreement and the intellectual property rights licensed to Fate under such license agreement shall automatically be excluded from the definitions of Fate Know-How and Fate Patents. Any copy of a Fate Upstream Agreement provided to Juno may be redacted to remove any confidential, proprietary or competitive information of Fate except to the extent such information is required for Juno to understand the scope of the Fate IP and any restrictions or limitations included therein.

5.9 Excluded Modulators; Partially Excluded Modulators.

5.9.1 If, at the time a milestone payment (other than the sales milestones indicated by a #) is incurred under Sections 5.5 or 5.6 with respect to a Modulated Product, the only Fate Modulator(s) used or incorporated in such Modulated Product are solely Excluded Modulator(s), then such Modulated Product shall not be considered a Modulated Product for purposes of such milestone payment under Sections 5.5 and 5.6.

5.9.2 If, at the time a milestone payment (other than the sales milestones indicated by a #) is incurred under Sections 5.5 or 5.6 with respect to a Modulated Product, the only Fate Modulator(s) used or incorporated in such Modulated Product are either (i) solely Partially Excluded Modulator(s) or (ii) solely Partially Excluded Modulator(s) and Excluded Modulator(s), then such Modulated Product shall be considered a Modulated Product for purposes of such milestone payment under Sections 5.5 and 5.6; provided that in each case the applicable payment owed on such Modulated Product is [***] of the amount that would otherwise be payable.

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5.9.3 If, at the time of First Commercial Sale of a Modulated Product, the only Fate Modulator(s) used or incorporated in such Modulated Product are solely Excluded Modulator(s), then such Modulated Product shall not be considered a Modulated Product for purposes of the sales milestone payments (i.e. those sales milestones indicated by a #) incurred under Sections 5.5 and 5.6 or for the royalties incurred under Section 5.7. Notwithstanding the foregoing, if [***], then this Section 5.9.3 shall cease to apply with respect to the applicable Modulated Product.

5.9.4 If, [***], the only Fate Modulator(s) used or incorporated in such Modulated Product are either (i) solely Partially Excluded Modulator(s) or (ii) solely Partially Excluded Modulator(s) and Excluded Modulators(s), then such Modulated Product shall be considered a Modulated Product for purposes of the sales milestone payments (i.e. those sales milestones indicated by a #) incurred under Sections 5.5 and 5.6 or for the royalties incurred under Section 5.7, provided that in each case the applicable payment owed on such Modulated Product is [***] of the amount that would otherwise be payable. Notwithstanding the foregoing, [***], then this Section 5.9.4 shall cease to apply with respect to the applicable Modulated Product.

ARTICLE 6
PAYMENTS; RECORDS

6.1 Payment Method. All payments due under this Agreement shall be made from a bank located in the United States by bank wire transfer in immediately available funds to a bank account designated by Fate. All payments hereunder shall be made in U.S. dollars. In the event that the due date of any payment subject to ARTICLE 5 is a Saturday, Sunday or national holiday, such payment may be paid on the following business day. Any payments that are not paid on the date such payments are due under this Agreement shall bear interest to the extent permitted by applicable law at the [***] calculated on the number of days such payment is delinquent.

6.2 Taxes. If laws or regulations require that taxes be withheld from any amounts payable hereunder, Juno will: (a) deduct those taxes from the otherwise remittable payment; (b) timely pay the taxes to the proper taxing authority; and (c) notify Fate and promptly furnish Fate with copies of any documentation evidencing such withholding.

6.3 Royalty Payments and Reports. Royalty payments under this Agreement with respect to Net Sales of Modulated Product in a given [***] shall be made to Fate or its designee [***] within [***] days following the [***]. Each royalty payment shall be accompanied by a report detailing, [***].

6.4 Books and Records; Accounting and Audits. Juno shall maintain, and cause its Affiliates and sublicensees to maintain, complete and accurate books and records, in accordance with U.S. GAAP, which are relevant to and sufficient in detail to verify, as applicable, the calculation of Net Sales and royalty and other payments owing hereunder. Fate shall maintain complete and accurate books and records, in accordance with U.S. GAAP, which are relevant to, as applicable, all costs or expenses of Fate incurred in performance of the Research Program, which books and records shall

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be sufficient in detail to verify such costs and expenses. A Party (the "Auditing Party") shall have the right, at its own expense and not more than once in any calendar year during the term of this Agreement, to have an independent, certified public accountant, selected by the Auditing Party, and under an obligation of confidence, audit such books and records as described above of the other Party (the "Audited Party") in the location(s) where such books and records are maintained upon reasonable notice (which shall be no less than [***] business days prior written notice) and during regular business hours, and for the sole purpose of verifying the basis and accuracy of the payments required and made under this Agreement (if Juno is the Audited Party) or the costs and expenses incurred in performance of the Research Program (if Fate is the Audited Party), as applicable. The report and communication of such accountant with respect to such an audit shall be limited to a certificate stating whether any, as applicable, report made or payment submitted during such period is accurate or inaccurate and, if a discrepancy is identified, shall also indicate the amount and if applicable, with respect to any report, the nature, of any discrepancy, and the correct information (with respect to the applicable period). Such accountant shall provide Fate and Juno with a copy of each such report simultaneously. Should the audit lead to the discovery of a discrepancy in any payment due by the Audited Party to the Auditing Party as provided in this Agreement: (i) to the Auditing Party's detriment, the Audited Party shall pay to the Auditing Party the amount of the discrepancy within [***] days of the Audited Party's receipt of the report; or (ii) to the Audited Party's detriment, the Audited Party may, as applicable, credit the amount of the discrepancy against future payments payable to the Auditing Party under this Agreement, and if there are no such payments payable, then the Auditing Party shall pay to the Audited Party the amount of the discrepancy within [***] days of the Auditing Party's receipt of the report. The cost charged by such accountant for such audit shall be borne by the Auditing Party, except that, in the event that the discrepancy is to the Auditing Party's detriment and is greater than [***] of the amount due for such audited period, then the Audited Party shall pay or reimburse the reasonable cost charged by such accountant for such audit. Once the Auditing Party has conducted an audit permitted by this Section 6.4 in respect of any period, it may not re-inspect the Audited Party's books and records in respect of such period, unless a subsequent audit of a separate reporting period uncovers fraud on the part of the Audited Party that is reasonably expected to have been occurring during the prior audited period. For clarity, however, if a discrepancy is identified by the accountant during the course of an audit and the Parties do not agree upon a resolution of such discrepancy, then the Auditing Party's accountant may re-inspect the books and records to the extent reasonably relevant to resolving such discrepancy. Notwithstanding anything herein to the contrary, upon the expiration of [***] years following the end of any calendar year, the right to audit, the books and records for such calendar year shall expire and such Party shall be released from any liability or accountability with respect to payments or Research Program costs and expenses as reflected in such books of such Party for such calendar year (including, for clarity, with respect to the calculation of royalties payable with respect to each such calendar year). The Parties shall no longer be required to retain such books and records for any calendar year after the expiration of the [***] calendar year following such calendar year.

6.5 Blocked Currency. If at any time legal restrictions in the Territory prevent the prompt remittance of any payments with respect to sales therein, Juno shall have the right and option to make such payments by depositing the amount thereof in local currency to Fate's account in a bank or depository in the Territory.

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6.6 Confidentiality. Each Party shall treat all financial information of the other Party that is subject to review under this ARTICLE 6 of this Agreement (including all royalty reports) as such other Party's Confidential Information.

ARTICLE 7
DUE DILIGENCE

7.1 Diligence. On a Selected Target-by-Selected Target basis, Juno shall use [***] Efforts to [***].

7.2 Diligence Failure. If, on a Selected Target-by-Selected Target basis, Fate believes that Juno has failed to satisfy the foregoing diligence requirements [***] then Fate shall give written notice to Juno and Juno shall have an opportunity of at least [***] days to cure such failure or to provide written evidence of its satisfaction of the foregoing diligence. If at the end of such [***] days Juno has not cured such failure [***].

ARTICLE 8
INTELLECTUAL PROPERTY

8.1 Ownership of Inventions; Disclosure.

(a) Ownership. Title to all inventions and other intellectual property made solely by employees or consultants of Fate in the course of performing the Research Program shall be owned by Fate; title to all inventions and other intellectual property made solely by employees or consultants of Juno in the course of performing the Research Program shall be owned by Juno; title to all inventions and other intellectual property made jointly by employees or consultants of Juno and Fate in the course of performing the Research Program shall be owned jointly by Juno and Fate. Inventorship of inventions and other intellectual property made pursuant to this Agreement shall be determined in accordance with the patent laws of the United States.

(b) Disclosure of Inventions. Each Party shall promptly disclose to the other any inventions made in connection with this Agreement. Neither Party shall use the Confidential Information of the other Party, including the Results of the Research Program, or any information constituting Collaboration IP to support any patent applications that are not a Collaboration Patent.

(c) Background IP. Each Party would retain ownership of intellectual property rights existing as of the Effective Date, or developed or acquired independently of the Research Program, and nothing in this Agreement shall assign any ownership to the other Party with respect to such intellectual property rights.

(d) Change of Control. Fate shall [***] upon a Change of Control of Fate with a Third Party that [***].

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8.2 Patent Prosecution.

(a) Fate Collaboration Patents. Fate shall be responsible, at its expense, and shall have the exclusive right for preparing, filing, prosecuting and maintaining the Fate Collaboration Patents and for conducting any interferences, re-examinations, reissues and oppositions relating thereto. Fate shall keep Juno fully informed with respect to (i) the issuance of patents filed by Fate pursuant to this Section 8.2(a) and (ii) the abandonment of any patent or patent application maintained by Fate pursuant to this Section 8.2(a). Without limiting the foregoing, (x) during the Research Term, with respect to any Fate Collaboration Patents that primarily relate to Engineered T-Cells and (y) after the Research Term, with respect to any Fate Collaboration Patents that primarily relate to Modulated Products incorporating as an active ingredient an Engineered T-Cell directed against Selected Target(s), Fate will: (A) provide Juno with copies of the text of the applications relating to such Fate Collaboration Patents at least [***] days before filing, except for urgent responses in which case Fate will provide a reasonable amount of time based on the circumstance; (B) provide Juno with a copy of each submission made to and document received from a patent authority, court or other tribunal regarding such Fate Collaboration Patents reasonably promptly after making such filing or receiving such document, including a copy of each application as filed together with notice of its filing date and application number; (C) keep Juno advised of the status of all material communications, actual and prospective filings or submissions regarding such Fate Collaboration Patents, and will give Juno copies of any such material communications, filings and submissions proposed to be sent to any patent authority or judicial body; and (D) reasonably incorporate in good faith Juno's comments on the communications, filings and submissions for such Fate Collaboration Patents. If Fate desires to include in any patent filing for a Fate Collaboration Patent any Fate Know-How or Collaboration Know-How that is Enabling (as that term is defined in Section 1.13), then Fate shall notify Juno in writing of its desire and provide to Juno the proposed filing that incorporates the Fate Know-How or Collaboration Know-How. If Juno consents in writing to incorporate such Fate Know-How or Collaboration Know-How in such patent filing, then such Fate Know-How or Collaboration Know-How shall remain Enabling if it first becomes publicly known as a result of the patent office's publication of the applicable patent filing. If Juno does not consent to incorporate such Fate Know-How or Collaboration Know-How in such patent filing, then any such publication shall result in such Fate Know-How or Collaboration Know-How ceasing to be Enabling.

(b) Joint Collaboration Patents. Juno shall be responsible [***], and shall have the exclusive first right for preparing, filing, prosecuting and maintaining the Joint Collaboration Patents that primarily relate to the Products and for conducting any interferences, re-examinations, reissues and oppositions relating thereto. Fate shall be responsible [***], and shall have the exclusive first right for preparing, filing, prosecuting and maintaining the Joint Collaboration Patents that do not primarily relate to the Products and for conducting any interferences, re-examinations, reissues and oppositions relating thereto. The controlling Party shall keep the non-controlling Party fully informed with respect to (i) the issuance of patents filed by the controlling Party pursuant to this Section 8.2(b), and (ii) the abandonment of any patent or patent application maintained by the controlling Party pursuant to this Section 8.2(b). Without limiting the foregoing, the controlling Party will (A) provide the non-controlling Party with copies of the text of the applications relating to the Joint Collaboration Patents at least [***] days before filing, except for urgent responses in which case the controlling Party will provide a reasonable amount of time based on the circumstance; (B) provide the non-controlling Party with a copy of each submission made to and document received from a patent authority, court or other tribunal regarding any Joint Collaboration Patents reasonably promptly after making such filing or receiving such document,

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including a copy of each application as filed together with notice of its filing date and application number; (C) keep the non-controlling Party advised of the status of all material communications, actual and prospective filings or submissions regarding the Joint Collaboration Patents, and will give the non-controlling Party copies of any such material communications, filings and submissions proposed to be sent to any patent authority or judicial body; and (D) reasonably consider in good faith the non-controlling Party's comments on the communications, filings and submissions for such Joint Collaboration Patents. If the controlling Party, in its sole discretion, declines to file, prosecute or maintain any Joint Collaboration Patents, then the controlling Party shall notify the non-controlling Party in writing thereof and the non-controlling Party shall have the right to file, prosecute and maintain such Joint Collaboration Patents and conduct any interferences, re-examinations, reissues and oppositions relating thereto.

(c) Juno Collaboration Patents. Juno shall be responsible, at its expense, and shall have the exclusive right for preparing, filing, prosecuting and maintaining the Juno Collaboration Patents and for conducting any interferences, re-examinations, reissues and oppositions relating thereto.

(d) Cooperation. Each Party shall reasonably cooperate with and assist the other Party in connection with the activities of such Party under this Section 8.2 upon the reasonable request of the other Party, including by making scientists and scientific records reasonably available and the execution of all such documents and instruments and the performance of such acts as may be reasonably necessary in order to permit the other Party to continue any filing, prosecution, maintenance or extension of such patents and patent applications.

8.3 Enforcement and Defense.

(a) Notice. Each Party shall promptly notify the other of any knowledge it acquires of any potential infringement of the Fate Patents, Fate Collaboration Patents or Joint Collaboration Patents by a Third Party.

(b) Right to Control Enforcement.

(1) Juno shall have the primary right, but not the obligation, to institute, prosecute, and control any action or proceeding by counsel of its own choice [***] with respect to infringement of Fate Patents (subject to Section 5.8), Fate Collaboration Patents or Joint Collaboration Patents that primarily relate to Modulated Products incorporating as an active ingredient an Engineered T-Cell directed against Selected Target(s), in the case of such Fate Patents or Fate Collaboration Patents only for so long as the License to Modulated Products directed against such Selected Target(s) is exclusive.

(2) Except as provided in Section 8.3(b)(1), (A) Juno shall have the primary right, but not the obligation, to institute, prosecute, and control any action or proceeding by counsel of its own choice with respect to infringement of the Joint Collaboration Patents that primarily relate to Engineered T-Cells, and (B) Fate shall have the primary right, but not the obligation, to institute, prosecute, and control any action or proceeding by counsel of its own choice with respect to infringement of the Joint Collaboration Patents that do not primarily relate to Engineered T-Cells.

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(3) Except as provided in Section 8.3(b)(1), Fate shall have the exclusive right, but not the obligation, to institute, prosecute, and control any action or proceeding by counsel of its own choice [***] with respect to infringement of the Fate Patents or Fate Collaboration Patents.

(4) If in any such proceeding the controlling Party is required to join the non-controlling Party for standing purposes or in order for the controlling Party to commence or continue any such proceeding, then the non-controlling Party shall join such proceeding, at the controlling Party's expense.

(5) If the controlling Party in any proceeding described in Section 8.3(b)(1) or Section 8.3(b)(2) fails to abate the infringement or file suit to enforce or defend the applicable patent rights against the infringing party, then the non-controlling Party shall have the right, but not the obligation, to take whatever action it deems appropriate to enforce or defend the applicable patent rights.

(6) Except as otherwise agreed by the Parties in connection with a cost-sharing arrangement, the amount of any recovery from a proceeding brought under Section 8.3(b)(1), Section 8.3(b)(2) or Section 8.3(b)(5), whether by settlement or otherwise, shall first be applied to the out-of-pocket costs of such action by both Parties, and any remaining amounts shall be distributed as follows: (i) in the case Juno brought and controlled such action or proceeding under Section 8.3(b)(1), [***] and (ii) in the case a Party brought and controlled such action or proceeding with respect to infringement of Joint Collaboration Patents under Section 8.3(b)(2) or Section 8.3(b)(5) [***]. The amount of any recovery from any action or proceeding with respect to infringement of Fate Patents or Fate Collaboration Patents brought by Fate under Section 8.3(b)(3) or Section 8.3(b)(5) shall be retained by Fate.

ARTICLE 9
CONFIDENTIALITY

9.1 Confidential Information. The Parties agree that, for the term of this Agreement and for [***] years thereafter, the receiving Party shall not, except as expressly provided in this ARTICLE 9, disclose to any Third Party any Confidential Information furnished to it by the disclosing Party hereto pursuant to this Agreement. For purposes of this ARTICLE 9, "Confidential Information" shall mean any information, samples or other materials, which if disclosed in tangible form is marked "confidential" or with other similar designation to indicate its confidential or proprietary nature, or, if disclosed orally, is indicated orally to be confidential or proprietary at the time of such disclosure. Notwithstanding the foregoing, Confidential Information shall not include any information that can be established by the receiving Party by competent proof that such information:

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

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

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

(d) was independently developed by the receiving Party as demonstrated by documented evidence prepared contemporaneously with such independent development; or

(e) was disclosed to the receiving Party, other than under an obligation of confidentiality, by a Third Party who had no obligation to the disclosing Party not to disclose such information to others.

Notwithstanding anything to the contrary in this Section 9.1, and for the purposes of clarity, the identity of the Targets and Selected Targets shall be deemed Confidential Information of both Juno and Fate. The identity of the Targets and Selected Targets shall not be disclosed by Fate or Juno to any Third Party for so long as the identity of such Target or Selected Target remains Confidential Information. The foregoing will not prevent a Party, if specifically asked by a Third Party about availability to work on a Target or Selected Target, from indicating that it is not available. Fate IP, Fate Collaboration IP and Fate Modulators will be Confidential Information of Fate, Juno Collaboration IP will be Confidential Information of Juno, and Joint Collaboration IP and Results will be Confidential Information of both Juno and Fate.

9.2 Permitted Use and Disclosures. Each Party hereto may use or disclose Confidential Information of the other Party to the extent such use or disclosure is reasonably necessary and permitted in (a) the exercise of the rights granted or performance of obligations hereunder (including Juno's development and commercialization of Modulated Products incorporating as an active ingredient an Engineered T-Cell directed against Selected Target(s), use of Joint Collaboration IP (subject to Section 4.5) and use of Results (subject to Section 4.6)), including in the case of Juno and solely with respect to the Joint Collaboration IP and Results for the development and commercialization of Modulated Products, (b) filing or prosecuting patent applications in accordance with Section 8.2 (subject to Section 8.1(b)), (c) prosecuting or defending litigation relating to or contemplated by this Agreement, (d) complying with applicable governmental laws, regulations or court order or otherwise submitting information to tax or other governmental authorities, or (e) conducting clinical trials pursuant to any right or license granted hereunder, provided that if a Party is required by governmental authority or court order to make any such disclosure, other than pursuant to a confidentiality agreement, it will give reasonable advance notice to the other Party of such disclosure and, save to the extent inappropriate in the case of patent applications, will use its reasonable efforts to secure confidential treatment of such information in consultation with the other Party prior to its disclosure (whether through protective orders or otherwise) and disclose only the minimum necessary to comply with such requirements. A Party that discloses Confidential Information of the other Party to Affiliates, actual and potential licensees and sublicensees, collaborators, employees, consultants, contractors or agents of such Party as permitted by this Section 9.2 shall require that any such Affiliate, actual or potential licensee or sublicensee, collaborator, employee, consultant or agent agrees to be bound by terms of confidentiality and non-use comparable in scope to those set forth in this ARTICLE 9.

9.3 Nondisclosure of Terms. Each of the Parties hereto agrees not to disclose the terms of this Agreement to any Third Party without the prior written consent of the other Party hereto, which

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consent shall not be unreasonably withheld, except to such Party's attorneys, advisors, investors, potential investors, acquirers and other similarly situated Third Parties, and actual or prospective collaborators or licensees, in each case on a need to know basis and provided that any such attorney, advisor, actual or potential investor or acquirer or other Third Party agrees to be bound by similar terms of confidentiality and non-use comparable in scope to those set forth in this ARTICLE 9, or to the extent permitted pursuant to the exceptions in Section 9.2(c) and (d). The Parties will coordinate in advance with each other in connection with the filing of this Agreement (including redaction of certain provisions of this Agreement) with the SEC or any stock exchange on which securities issued by a Party are traded, and each Party will use reasonable efforts to seek confidential treatment for the terms proposed to be redacted; provided that each Party will ultimately retain control over what information to disclose to the SEC or any stock exchange, as the case may be, and provided further that the Parties will use their reasonable efforts to file redacted versions with any governing bodies which are consistent with redacted versions previously filed with any other governing bodies. Other than such obligation, neither Party (or its Affiliates) will be obligated to consult with or obtain approval from the other Party with respect to any filings with the SEC or any stock exchange.

9.4 Press Release. The Parties desire to issue a press release regarding this Agreement. Such press release shall be mutually-agreed to by the Parties, and attached hereto as Exhibit D. Such press release shall be issued within two (2) business days of the Effective Date. Except as required by applicable laws (including disclosure requirements of the SEC or any stock exchange on which securities issued by a Party are traded), neither Party shall make any other public announcement concerning this Agreement or the subject matter hereof without the prior written consent of the other, which shall not be unreasonably withheld or delayed; provided that each Party may make any public statement in response to questions by the press, analysts, investors or those attending industry conferences or financial analyst calls, or issue press releases, so long as any such public statement or press release is not inconsistent with prior public disclosures or public statements approved by the other Party pursuant to Section 9.3 or this Section 9.4. In the event of a required public announcement, to the extent practicable under the circumstances, the Party making such announcement shall provide the other Party with a copy of the proposed text of such announcement at least [***] business days prior to the scheduled release to afford such other Party a reasonable opportunity to review and comment upon the proposed text.

9.5 Publications. At least [***] days prior to publishing, publicly presenting, and/or submitting for written or oral publication a manuscript, abstract or the like that includes Results that have not been previously published, each Party shall provide to the other Party a draft copy thereof for its clinical review (unless such Party is required by law to publish such Results sooner, in which case such Party shall provide such draft copy to the other Party as much in advance of such publication as possible). The publishing Party shall consider in good faith any comments provided by the other Party during such [***] day period. The contribution of each Party shall be noted in all publications or presentations by acknowledgment or co-authorship, whichever is appropriate.

9.6 Prior Non-Disclosure Agreement. As of the Effective Date, the terms of this ARTICLE 9 shall supersede any prior non-disclosure, secrecy or confidentiality agreement between the Parties (or their Affiliates) dealing with the subject of this Agreement. Any information disclosed pursuant to any such prior agreement shall be deemed Confidential Information for purposes of this Agreement.

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9.7 Equitable Relief. Given the nature of the Confidential Information and the competitive damage that would result to a Party upon unauthorized disclosure, use or transfer of its Confidential Information to any Third Party, the Parties agree that monetary damages would not be a sufficient remedy for any breach of this ARTICLE 9. In addition to all other remedies, a Party shall be entitled to specific performance and injunctive and other equitable relief as a remedy for any breach or threatened breach of this ARTICLE 9.

ARTICLE 10
REPRESENTATIONS AND WARRANTIES; COVENANTS

10.1 Juno. Juno represents, warrants and covenants that: (a) it has the legal power, authority and right to enter into this Agreement and to fully perform all of its obligations hereunder; (b) this Agreement is a legal and valid obligation binding upon it and enforceable in accordance with its terms; (c) the performance of its obligations hereunder do not conflict with, violate or breach or constitute a default or require any consent under, any contractual obligations of Juno; and (d) as of the Effective Date there is no claim or demand of any Third Party pertaining to, or any proceeding that is pending or, to the knowledge of Juno, threatened, that challenges the rights of Juno to conduct its obligations under the Research Program.

10.2 Fate. Fate represents, warrants and covenants that: (a) it has the legal power, authority and right to enter into this Agreement and to fully perform all of its obligations hereunder; (b) this Agreement is a legal and valid obligation binding upon it and enforceable in accordance with its terms; (c) the performance of its obligations and the grant of rights hereunder do not conflict with, violate or breach or constitute a default or require any consent under, any contractual obligations of Fate; (d) [***], (e) to the knowledge of Fate, as of the Effective Date, [***], (f) Fate will not knowingly use or incorporate any patent, know-how or other intellectual property rights of a Third Party in conducting its obligations under the Research Program, and (g) as of the Effective Date, [***].

10.3 Disclaimer. Juno and Fate specifically disclaim any guarantee that the Research Program will be successful, in whole or in part. Provided that the Parties perform their obligations under this Agreement and the Research Plan, the failure of the Parties to successfully develop, Modulators and/or Products will not constitute a breach of any representation or warranty or other obligation under this Agreement. EXCEPT AS OTHERWISE EXPRESSLY SET FORTH IN THIS AGREEMENT, FATE AND JUNO MAKE NO REPRESENTATIONS AND EXTEND NO WARRANTIES OR CONDITIONS OF ANY KIND, EITHER EXPRESS OR IMPLIED, WITH RESPECT TO THE FATE IP, COLLABORATION IP, INFORMATION DISCLOSED HEREUNDER OR PRODUCTS OR MODULATED PRODUCTS INCLUDING, BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, VALIDITY OF ANY COLLABORATION IP, PATENTED OR UNPATENTED, OR NONINFRINGEMENT OF THE INTELLECTUAL PROPERTY RIGHTS OF THIRD PARTIES.

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10.4 Mutual Covenants.

(a) Employees, Consultants and Contractors. Each Party covenants that it has obtained or will obtain written agreements from each of its employees, consultants and contractors who perform research or development activities pursuant to this Agreement, which agreements will obligate such persons to obligations of confidentiality and non-use and to assign (or, if assignment is not permitted to license exclusively) inventions in a manner consistent with the provisions of this Agreement; provided that such Party shall be entitled to agree to commercially reasonable terms that allow any such Third Party consultants and contractors to retain rights in or to intellectual property that is generally applicable to such Third Party's business, including any improvements to its preexisting intellectual property rights.

(b) No Debarment. Each Party represents, warrants and covenants to the other party that (i) it is not debarred or disqualified under the U.S. Federal Food, Drug and Cosmetic Act, as may be amended, or comparable laws in any country or jurisdiction other than the U.S., (ii) neither it, nor to its knowledge, any of its employees, consultants or contractors, have, to its knowledge, been charged with, or convicted of, any felony or misdemeanor within the ambit of 42 U.S.C. §§ 1320a-7(a), 1320a-7(b)(l)-(3), and (iii) it does not, and will not during the term, employ or use the services of any person who is debarred or disqualified, in connection with activities relating to the Research Program or any Product or Modulated Product. In the event that either Party becomes aware of the debarment or disqualification or threatened debarment or disqualification of any person providing services to such party, including the party itself or its Affiliates or sublicensees, which directly or indirectly relate to activities contemplated by this Agreement, such Party shall immediately notify the other Party in writing and such Party shall cease employing, contracting with, or retaining any such person to perform any such services.

(c) Compliance with Laws. In the performance of its obligations under this Agreement, each Party shall comply and shall cause its and its Affiliates' employees and contractors to comply with all applicable laws, rules and regulations.

ARTICLE 11
INDEMNIFICATION

11.1 Juno. Juno agrees to indemnify, defend and hold Fate and its Affiliates and their respective directors, officers, employees, agents and their respective successors, heirs and assigns (the "Fate Indemnitees") harmless from and against any losses, costs, claims, damages, liabilities or expense (including reasonable attorneys' and professional fees and other expenses of litigation) (collectively, "Liabilities") arising, directly or indirectly out of or in connection with Third Party claims, suits, actions, demands or judgments, relating to [***].

11.2 Fate. Fate agrees to indemnify, defend and hold Juno and its Affiliates and sublicensees and their respective directors, officers, employees, agents and their respective successors, heirs and assigns (the "Juno Indemnitees") harmless from and against any Liabilities arising, directly or indirectly out of or in connection with Third Party claims, suits, actions, demands or judgments, relating to [***].

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11.3 Indemnification Procedure. A Party that intends to claim indemnification (the "Indemnitee") under this ARTICLE 11 shall promptly notify the other Party (the "Indemnitor") in writing of any claim, complaint, suit, proceeding or cause of action with respect to which the Indemnitee intends to claim such indemnification (for purposes of this Section 11.3, each a "Claim"), and the Indemnitor shall have sole control of the defense and/or settlement thereof; provided that the Indemnitee shall have the right to participate, at its own expense, with counsel of its own choosing in the defense and/or settlement of such Claim. The indemnification obligations of the Parties under this ARTICLE 11 shall not apply to amounts paid in settlement of any Claim if such settlement is effected without the consent of the Indemnitor, which consent shall not be withheld or delayed unreasonably. The failure to deliver written notice to the Indemnitor within a reasonable time after the commencement of any such Claim, if prejudicial to its ability to defend such action, shall relieve such Indemnitor of any liability to the Indemnitee under this ARTICLE 11, but the omission so to deliver written notice to the Indemnitor shall not relieve the Indemnitor of any liability to any Indemnitee otherwise than under this ARTICLE 11. The Indemnitee under this ARTICLE 11, and its employees, at the Indemnitor's request and expense, shall provide full information and reasonable assistance to Indemnitor and its legal representatives with respect to such Claims covered by this indemnification. It is understood that only Juno or its permitted assignee may claim indemnity under this ARTICLE 11 (on its own behalf or on behalf of a Juno Indemnitee), and other Juno Indemnitees may not directly claim indemnity hereunder. Likewise, it is understood that only Fate may claim indemnity under this ARTICLE 11 (on its own behalf or on behalf of a Fate Indemnitee), and other Fate Indemnitees may not directly claim indemnity hereunder.

ARTICLE 12
TERM AND TERMINATION

12.1 Term. Unless earlier terminated, this Agreement will continue in full force and effect from the Effective Date until the date no further payments are due under ARTICLE 5 above. If no Selected Target has been selected in accordance with Section 2.8 by the end of the Research Term, the following provisions shall expire at the end of the Research Term: Sections 4.1, 4.2, 4.3(b), 4.3(c), 4.3(e) 8.2 and 8.3 and ARTICLE 7. For any Modulated Product incorporating as an active ingredient an Engineered T-Cell directed against Selected Target(s) that is subject to the License granted under Section 4.1, on a Modulated Product-by-Modulated Product and country-by-country basis, following the date that no further payments are due under ARTICLE 5 with respect to such Modulated Product in a country (but not an early termination of this Agreement), and provided that Juno has made all payments due and payable to Fate with respect to such Modulated Product in such country, Juno shall have a perpetual, fully paid-up, non-exclusive license under the Fate IP and Fate Collaboration IP (subject to Section 5.8) to make, have made, use, sell, offer for sale and import such Modulated Product in such country for use in the Field.

12.2 Termination for Breach. Subject to the provisions of this Section 12.2, either Party may terminate the Research Program and this Agreement in the event the other Party hereto shall have materially breached or defaulted in the performance of any of its material obligations hereunder, and such default shall have continued for [***] days ([***] days for payment breach) after written notice thereof was provided to the breaching Party by the non-breaching Party. Any termination shall become effective at the end of such [***] day ([***] day for payment breach)

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period unless the breaching Party has cured any such breach or default prior to the expiration of the [***] day ([***] day for payment breach) period. Fate shall have the right to terminate this Agreement during the Research Term for Juno's uncured material breach in accordance with the foregoing, but shall not have the right to terminate this Agreement after the Research Term, except in the event that Juno fails to make any undisputed payment when due and does not cure such failure in accordance with this Section 12.2. In any event, Fate shall have the right to seek monetary damages or other available remedies for any breach of this Agreement by Juno.

12.3 Termination upon Notice. Juno may terminate this Agreement upon [***] written notice to Fate; provided, however, that notice of such termination of this Agreement may not be provided at any time prior to the second anniversary of the Effective Date.

12.4 Effect of Expiration or Termination.

(a) Accrued Rights and Obligations. Termination of this Agreement for any reason shall not release either Party hereto from any liability which, at the time of such termination, has already accrued to the other Party or which is attributable to a period prior to such termination nor preclude either Party from pursuing any rights and remedies it may have hereunder or at law or in equity with respect to any breach of this Agreement.

(b) Return of Materials. Upon any termination of this Agreement, Juno and Fate shall promptly return to the other all Confidential Information received from the other Party, except one copy of which may be retained for archival purposes subject to a continuing obligation of confidentiality.

(c) Effect of Expiration or Termination. Upon any expiration or termination of this Agreement, except to the extent of any license as provided in Section 12.1, in addition to any rights and remedies that either Party may have at law or equity: (i) the licenses and rights to Juno under Section 4.1 shall terminate, (ii) each party shall immediately cease using the Confidential Information and Materials of the other party, for all purposes, and (iii) all other rights and obligations of the Parties under this Agreement shall terminate, except as provided elsewhere in this Section 12.4 and Section 12.5.

12.5 Survival Sections. Sections 2.7 (last sentence only), 4.5, 4.6, 4.7, 6.4 (for the period described therein), 6.6, 8.1 (excluding clause (d)), 10.3, 12.4, 12.5 and 12.6 and Articles 1, 9, 11 and 13 shall survive the expiration or termination of this Agreement for any reason. If, after the termination of this Agreement, Juno, itself or through any Affiliate or through a licensee pursuant to a license granted by Juno under the Collaboration IP, develops, commercializes or otherwise exploits any Modulated Product, then all of the payment provisions of Sections 5.5, 5.6 and 5.7 and ARTICLE 6 shall apply to such Modulated Product and shall survive termination of this Agreement for such purpose.

12.6 Termination Not Sole Remedy. Termination is not the sole remedy under this Agreement and, whether or not termination is effected, all other remedies will remain available except as agreed to otherwise herein.

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ARTICLE 13
MISCELLANEOUS

13.1 Governing Laws. This Agreement shall be governed by, interpreted and enforced in accordance with the laws of the State of New York, without regard to principles of conflicts of laws. Subject to Section 13.2, all disputes arising out of this Agreement shall be subject to the exclusive jurisdiction and venue of the state and federal courts located in the Southern District of New York (and the appellate courts thereof), and each Party hereby irrevocably consents to the personal and non-exclusive jurisdiction and venue thereof.

13.2 Disputes. If any dispute, claim or controversy of any nature arising out of or relating to this Agreement, including any action or claim based on tort, contract or statute, or concerning the interpretation, effect, termination, validity, performance or breach of this Agreement (each, a "Dispute"), arises between the Parties and the Parties cannot resolve such Dispute within [***] days of a written request by either Party to the other Party, the Parties agree to refer the Dispute to the respective Chief Executive Officers of each Party for resolution. If, after an additional [***] days, such representatives have not succeeded in negotiating a resolution of the Dispute, and a Party wishes to pursue the matter, each such dispute, controversy or claim will be submitted to the Judicial Arbitration and Mediation Service ("JAMS") or its successor for non-binding mediation in New York, New York before a single mediator. The Parties will cooperate with JAMS and with one another in selecting a mediator from the JAMS panel of neutrals and in scheduling the mediation proceedings. The Parties agree that they will participate in the mediation in good faith and that they will share equally in its costs. Any Dispute that cannot be resolved through mediation, and any Dispute with respect to which a Party is claiming equitable relief, shall be resolved by a court of competent jurisdiction.

13.3 Independent Contractors. The relationship of the Parties under this Agreement is that of independent contractors. Neither Party shall be deemed to be an employee, agent, partner, franchisor, franchisee, joint venture or legal representative of the other for any purpose as a result of this Agreement or the transactions contemplated thereby, and neither shall have the right, power or authority to create any obligation or responsibility on behalf of the other.

13.4 Assignment. The Parties agree that neither this Agreement nor their rights and obligations under this Agreement shall be delegated, assigned or otherwise transferred to a third party, in whole or part, whether voluntarily or by operation of law, including by way of sale of assets, merger or consolidation, without prior written consent of the other Party. Notwithstanding the foregoing, a Party may, without such consent, assign this Agreement and its rights and obligations hereunder in their entirety (a) to an Affiliate, or (b) in connection with a Change of Control. Subject to the foregoing, this Agreement shall be binding on and inure to the benefit of the Parties and their permitted successors and assigns. Any attempted delegation, assignment or transfer in violation of the foregoing shall be null and void.

13.5 Force Majeure. If either Party is prevented from or delayed in the performance of any of its obligations hereunder by reason of acts of God, war, strikes, riots, storms, fires, earthquake, power shortage or failure, failure of the transportation system, or any other cause whatsoever beyond the reasonable control of the Party ("Force Majeure Event"), the Party so prevented or delayed shall

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be excused from the performance of any such obligation during a period that is reasonable in light of the Force Majeure Event, but no less than the duration of the Force Majeure Event itself.

13.6 Right to Develop Independently. Except as otherwise expressly set forth in this Agreement, nothing in this Agreement shall impair either Party's right to independently acquire, license, develop for itself, or have others develop for it, intellectual property and technology performing similar functions as the other Party's IP or to market and distribute products or services based on such other intellectual property and technology.

13.7 Bankruptcy. The licenses and sublicenses granted by Fate under this Agreement are and shall be deemed to be, for purposes of 11 U.S.C. Section 365(n), a license of "Intellectual Property Rights" as defined thereunder, and if Fate is under any proceeding under the United States Bankruptcy Code and the trustee in bankruptcy of Juno, or Juno as a debtor in possession, elects to reject the foregoing license, Juno may, pursuant to 11 U.S.C. Section 365(n)(1) and (2), retain any and all of Juno's rights under such license and sublicense to the maximum extent permitted by law.

13.8 Notices. Any notices required or permitted under this Agreement or required by law must be in writing by first class certified mail or international express delivery service (such as DHL), in each case properly posted and fully prepaid to the applicable address below, or to such other address as either Party may substitute by written notice under this Section. Notice shall be deemed to have been given when delivered or, if delivery is not accomplished by reason or some fault of the addressee, when tendered.

If to Fate:	Fate Therapeutics, Inc. 3535 General Atomic Court, Suite 200 San Diego, California, 92121, USA Attention: Chief Operating Officer
If to Juno:	Juno Therapeutics, Inc. 307 Westlake Avenue North, Suite 300 Seattle, Washington, 98109, USA Attention: General Counsel

13.9 Interpretation. The captions and headings to this Agreement are for convenience only, and are to be of no force or effect in construing or interpreting any of the provisions of this Agreement. Unless specified to the contrary, references to Articles, Sections or Exhibits mean the particular Articles, Sections or Exhibits to this Agreement and references to this Agreement include all Exhibits hereto. Unless context otherwise clearly requires, whenever used in this Agreement: (a) the words "include" or "including" shall be construed as incorporating, also, "but not limited to" or "without limitation;" (b) the word "day" or "year" means a calendar day or year unless otherwise specified; (c) the word "notice" shall mean notice in writing (whether or not specifically stated) and shall include notices, consents, approvals and other written communications contemplated under this Agreement; (d) the words "hereof," "herein," "hereby" and derivative or similar words refer to this Agreement (including any Exhibits); (e) the word "or" shall be construed as the inclusive meaning identified with the phrase "and/or;"(f) provisions that require that a Party, the Parties or a committee

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hereunder "agree," "consent" or "approve" or the like shall require that such agreement, consent or approval be specific and in writing, whether by written agreement, letter, approved minutes or otherwise; (g) words of any gender include the other gender; (h) words using the singular or plural number also include the plural or singular number, respectively; and (i) the word "law" (or "laws") when used herein means any applicable, legally binding statute, ordinance, resolution, regulation, code, guideline, rule, order, decree, judgment, injunction, mandate or other legally binding requirement of a government entity, together with any then-current modification, amendment and re-enactment thereof, and any legislative provision substituted therefor. The Parties and their respective counsel have had an opportunity to fully negotiate this Agreement. If any ambiguity or question of intent or interpretation arises, this Agreement shall be construed as if drafted jointly by the Parties, and no presumption or burden of proof shall arise favoring or disfavoring any Party by virtue of the authorship of any provision of this Agreement. No prior draft of this Agreement shall be used in the interpretation or construction of this Agreement.

13.10 Compliance with Laws. Each Party shall furnish to the other Party any information requested or required by that Party during the term of this Agreement or any extensions hereof to enable that Party to comply with the requirements of any U.S. or foreign, state and/or government agency.

13.11 Further Assurances. At any time or from time to time on and after the date of this Agreement, a Party shall at the written and reasonable request of the requesting Party: (a) deliver to the requesting Party such records, data or other documents consistent with the provisions of this Agreement; (b) execute, and deliver or cause to be delivered, all such consents, documents or further instruments of transfer or license; and (c) take or cause to be taken all such actions, as the requesting Party may reasonably deem necessary or desirable in order for the requesting Party to obtain the full benefits of this Agreement and the transactions contemplated hereby.

13.12 Use of Names and Marks. Neither Party shall use the name, trade name, trademark or other designation of the other Party or its employees in connection with any products, promotion or advertising without the prior written permission of the other Party. For clarity, either Party may, without the other Party's prior permission, reasonably utilize the other Party's name or names of its employees in statements of fact, in legal proceedings, patent filings, and regulatory filings.

13.13 Severability. If any provision, or portion thereof, in this Agreement is held to be invalid or unenforceable to any extent, such provision of this Agreement shall be enforced to the maximum extent permissible by applicable law so as to effect the intent of the Parties, and the remainder of the Agreement shall remain in full force and effect. The Parties shall negotiate in good faith a valid and enforceable substitute provision for any invalid or unenforceable provision that most nearly achieves the intent and economic effect of such invalid or unenforceable provision as if it were enforceable.

13.14 Waiver. Any waiver of any provision of this Agreement or of a Party's rights or remedies under this Agreement must be in writing to be effective. Failure, neglect, or delay by a Party to enforce the provisions of this Agreement or its rights or remedies at any time, shall not be construed as a waiver of such Party's rights under this Agreement and shall not in any way affect the validity of the whole or any part of this Agreement or prejudice such Party's right to take subsequent action. No exercise or enforcement by either Party of any right or remedy under this Agreement

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shall preclude the enforcement by such Party of any other right or remedy under this Agreement or that such Party is entitled by law to enforce.

13.15 Limitation of Liability. EXCEPT FOR LIABILITY FOR BREACH OF ARTICLE 9, NEITHER PARTY SHALL BE ENTITLED TO RECOVER FROM THE OTHER PARTY ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL OR PUNITIVE DAMAGES IN CONNECTION WITH THIS AGREEMENT OR ANY LICENSE GRANTED HEREUNDER; *provided, however,* that this Section 13.15 shall not be construed to limit either Party's indemnification obligations under ARTICLE 11.

13.16 Entire Agreement; Modification. This Agreement (including the Exhibits and any amendments hereto signed by both Parties) constitutes the entire understanding and agreement between the Parties with respect to the subject matter hereof and supersedes any and all prior and contemporaneous negotiations, representations, agreements, and understandings, written or oral, that the Parties may have reached with respect to the subject matter hereof. Except as set forth in Section 13.13, this Agreement may not be altered, amended or modified in any way except by a writing (excluding email or similar electronic transmissions) signed by the authorized representatives of both Parties.

13.17 Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Once signed, any reproduction of this Agreement made by reliable means (e.g., pdf, photocopy, facsimile) is considered an original.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be duly executed by their authorized representatives and delivered in duplicate originals as of the Effective Date.

JUNO THERAPEUTICS, INC.		FATE THERAPEUTICS, INC.	
By:	/s/ Hans Bishop	By:	/s/ Scott Wolchko
Name:	H. Bishop	Name:	Scott Wolchko
Title:	C.E.O.	Title:	COO/CFO

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EXHIBIT A

Initial Research Plan

[***]

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EXHIBIT B

Target List

[Initial list of targets (up to [***]), to be provided by Juno within [***] days of the Effective Date]

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EXHIBIT D

Press Release

Juno Therapeutics and Fate Therapeutics Announce Strategic Research Collaboration to Improve the Therapeutic Profile of Engineered T Cell Immunotherapies

Alliance Utilizes Fate's Hematopoietic Cell Programming Platform to Identify Small Molecule Modulators for Juno's Leading Genetically-Engineered T Cell Immunotherapies

SEATTLE and SAN DIEGO — May 6, 2015 — Juno Therapeutics, Inc. (NASDAQ: JUNO) and Fate Therapeutics, Inc. (NASDAQ: FATE) announced today that they have executed a strategic research collaboration and license agreement to identify and utilize small molecules to modulate Juno's genetically-engineered T cell product candidates to improve their therapeutic potential for cancer patients. The collaboration brings together Juno's industry-leading expertise in the development of chimeric antigen receptor (CAR) and T cell receptor (TCR) based cellular immunotherapies and Fate's innovative platform for programming the biological properties and *in vivo* therapeutic potential of hematopoietic cells.

"A deep understanding of T cell biology is the basis of Juno's approach to creating best-in-class cellular immunotherapies," said Hans Bishop, Chief Executive Officer of Juno Therapeutics. "Partnering with Fate Therapeutics, and accessing its strong science and leading platform for modulating the properties of immunological cells, enables interrogation of new avenues of T cell manipulation and provides an opportunity to enhance the therapeutic profile of our genetically-engineered T cell product candidates."

Through the four-year research and development collaboration, Fate will be responsible for screening and identifying small molecules that modulate the biological properties of engineered T cells. Juno will be responsible for the development and commercialization of engineered T cell immunotherapies incorporating Fate's small molecule modulators. Juno has the option to extend the exclusive research term for two years through an additional payment and continued funding of collaboration activities.

"We are excited to establish this strategic alliance with Juno, a company that shares our deep commitment to developing transformative cellular therapeutics for patients afflicted with life-threatening disorders," said Christian Weyer, M.D., M.A.S., President and Chief Executive Officer of Fate Therapeutics. "This partnership exemplifies the extension of our small molecule programming platform to additional hematopoietic cell types, such as T cells, as we continue to build and advance our innovative pipeline of programmed hematopoietic cellular therapeutic candidates."

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Financial terms of the agreement include an upfront payment to Fate of $5 million and the purchase by Juno of one million shares of Fate common stock at $8.00 per share. Juno will fund all collaboration activities for an exclusive four-year research term. For each product developed by Juno that incorporates modulators identified through the collaboration, Fate is eligible to receive approximately $50 million in target selection fees and clinical, regulatory and commercial milestones, as well as low single-digit royalties on sales. Fate retains exclusive rights to its intellectual property for all other purposes.

About Chimeric Antigen Receptor (CAR) Technology

Juno's chimeric antigen receptor (CAR) technology genetically engineers T cells to recognize and kill cancer cells. Juno's CAR T cell technology inserts a gene for a particular CAR into the T cell, enabling it to recognize cancer cells based on the expression of a specific protein located on the cell surface. When the engineered T cell engages the target protein on the cancer cell, it initiates a cell-killing response against the cancer cell.

About Cell Programming

Since its founding, Fate Therapeutics has been dedicated to programming the function of cells *ex vivo* to improve their therapeutic potential. Using advanced molecular characterization tools and technologies, Fate's platform enables the identification of small molecule or biologic modulators that promote rapid and supra-physiologic activation or inhibition of therapeutically-relevant genes and cell-surface proteins, such as those involved in the homing, proliferation and survival of hematopoietic stem cells or those involved in the persistence, proliferation and reactivity of immunological cells. Fate utilizes its deep understanding of the hematopoietic system to rapidly assess and quantify the therapeutic potential of programmed hematopoietic cells *in vivo*, and applies its modulators to maximize the safety and efficacy of hematopoietic cellular therapeutics.

About Juno Therapeutics, Inc.

Juno Therapeutics is building a fully integrated biopharmaceutical company focused on revolutionizing medicine by re-engaging the body's immune system to treat cancer. Founded on the vision that the use of human cells as therapeutic entities will drive one of the next important phases in medicine, Juno is developing cell-based cancer immunotherapies based on chimeric antigen receptor and high-affinity T cell receptor technologies to genetically engineer T cells to recognize and kill cancer. Juno is developing multiple cell-based product candidates to treat a variety of B-cell malignancies as well as solid tumors. Several product candidates have shown compelling evidence of tumor shrinkage in the clinical trials in refractory leukemia and lymphoma conducted to date. Juno's long-term aim is to improve and leverage its cell-based platform to develop new product candidates that address a broader range of cancers and human diseases. Juno brings together innovative technologies from some of the world's leading research institutions, including the Fred Hutchinson Cancer Research Center, Memorial Sloan Kettering Cancer Center, Seattle Children's Research Institute, and The National Cancer Institute.

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About Fate Therapeutics, Inc.

Fate Therapeutics is a clinical-stage biopharmaceutical company engaged in the development of programmed cellular therapeutics for the treatment of severe, life-threatening diseases. The Company's approach utilizes established pharmacologic modalities, such as small molecules, to program the fate and function of cells *ex vivo*. The Company's lead product candidate, PROHEMA®, is an *ex vivo* programmed hematopoietic cellular therapeutic, which is currently in clinical development for the treatment of hematologic malignancies and rare genetic disorders in patients undergoing hematopoietic stem cell transplantation (HSCT). The Company is also using its proprietary induced pluripotent stem cell platform to develop *ex vivo* reprogrammed hematopoietic and myogenic cellular therapeutics. Fate Therapeutics is headquartered in San Diego, CA. For more information, please visit www.fatetherapeutics.com.

Juno Forward Looking Statements

This press release contains forward-looking statements, including statements regarding the impact, benefits, timing, conduct, and funding of collaboration between the companies, as well as the capabilities, expertise, and responsibilities of each. Forward-looking statements are subject to risks and uncertainties that could cause actual results to differ materially from such forward-looking statements, and reported results should not be considered as an indication of future performance. These risks and uncertainties include, but are not limited to, risks associated with: the success, cost, and timing of Juno's product development activities and clinical trials, and Juno's ability to finance these activities and trials; Juno's ability to obtain regulatory approval for and to commercialize its product candidates; Juno's ability to establish a commercially-viable manufacturing process and manufacturing infrastructure; regulatory requirements and regulatory developments; success of Juno's competitors with respect to competing treatments and technologies; Juno's dependence on third-party research institution collaborators and other contractors in Juno's research and development activities, including for the conduct of clinical trials and the manufacture of Juno's product candidates; Juno's ability to obtain, maintain, or protect intellectual property rights related to its product candidates; amongst others. For a further description of the risks and uncertainties that could cause actual results to differ from those expressed in these forward-looking statements, as well as risks relating to Juno's business in general, see Juno's Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 19, 2015 and Juno's other periodic reports filed with the Securities and Exchange Commission. These forward-looking statements speak only as of the date hereof. Juno disclaims any obligation to update these forward-looking statements.

Fate Therapeutics Forward-Looking Statements

This release contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995, including statements regarding the Company's ability to identify and evaluate small molecule modulators for the programming of T cells, the Company's plans to undertake certain preclinical research on the therapeutic potential of programmed T cells, our expectations regarding the clinical effectiveness and safety of programmed T cell therapeutics,

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including CAR and TCR products developed through the collaboration, and the potential benefits of the collaboration, including expected funding and payments to be received under the collaboration. These and any other forward-looking statements in this release are based on management's current expectations of future events and are subject to a number of risks and uncertainties that could cause actual results to differ materially and adversely from those set forth in or implied by such forward-looking statements. These risks and uncertainties include, but are not limited to, the risk that we are unable to conduct or complete activities required under the collaboration, the risk of cessation or delay of any development activities under the collaboration for a variety of reasons (including any difficulties or delays in identifying modulators for the programming of T cells, and any adverse effects or events or other negative results that may be observed in clinical development of any product candidates developed through the collaboration), and the risk that funding and payments received under the collaboration may be less than expected. For a discussion of other risks and uncertainties, and other important factors, any of which could cause our actual results to differ from those contained in the forward-looking statements, see the risks and uncertainties detailed in the Company's periodic filings with the Securities and Exchange Commission, including but not limited to the Company's Form 10-K for the year ended December 31st, 2014, and from time to time the Company's other investor communications. We are providing the information in this release as of this date and do not undertake any obligation to update any forward-looking statements contained in this release as a result of new information, future events or otherwise.

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EXHIBIT E

Fate Upstream Agreements

None

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Exhibit 10.2

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 UNDER RULE 24b-2 OF THE SECURITIES EXCHANGE ACT OF 1934.

FATE THERAPEUTICS, INC.

AMENDMENT TO AMENDED AND RESTATED INVESTOR RIGHTS AGREEMENT

This Amendment to the Amended and Restated Investor Rights Agreement (this "**Amendment**"), is made as of the 4th day of May 2015, by and among Fate Therapeutics, Inc., a Delaware corporation (the "**Company**"), the holders of shares of the Company's common stock as set forth on signature pages hereto (the "**Stockholders**") and Juno Therapeutics, Inc. ("**Juno**") This amendment amends that certain Amended and Restated Investor Rights Agreement, dated as of August 8, 2013, by and among the Company and the parties named therein (the "**Investor Rights Agreement**"). All capitalized terms used but not defined herein shall have the meanings set forth in the Investor Rights Agreement unless otherwise provided.

RECITALS

A. **WHEREAS**, the Company has agreed that Juno shall be entitled to certain registration rights with respect to the shares of common stock issued, or to be issued, to Juno pursuant to that certain Stock Purchase Agreement by and between Juno and the Company of even date herewith;

B. **WHEREAS**, the Company and Juno have entered into that certain Collaboration and License Agreement of even date herewith;

C. **WHEREAS**, pursuant to Section 4.10 of the Investor Rights Agreement, any provision of the Investor Rights Agreement may be amended or waived (either generally or in a particular instance and either retroactively or prospectively) with the written consent of the Company and an Investor or Investors holding, in the aggregate, more than fifty percent (50%) of the outstanding shares of Registrable Securities held by Investors; and

D. **WHEREAS**, in consideration for, and as an inducement for entering into such collaboration and license agreement, the Company and the Stockholders desire to amend the Investor Rights Agreement as provided herein.

AGREEMENT

1. Definition of Form S-3 Initiating Holders. The definition of "Form S-3 Initiating Holders" as set forth in Section 1.1 of the Investor Rights Agreement is amended and restated to read in its entirety as follows:

> "**Form S-3 Initiating Holders**" means: (i) any Holder or Holders who in the aggregate hold not less than twenty-five percent (25%) of the Registrable Securities then outstanding and who propose to register securities, the aggregate offering price of which, net of underwriting discounts and commissions, exceeds $1,000,000, and (ii) beginning on May 4, 2017, Juno Therapeutics, Inc. ("Juno") to the extent Juno proposes to register either (A) securities, the aggregate offering price of which, net of underwriting discounts and commissions, exceeds $1,000,000, or (B) all Registrable Securities then held by Juno.

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2. Definition of Initiating Holders. The definition of "Initiating Holders" as set forth in Section 1.1 of the Investor Rights Agreement is amended and restated to read in its entirety as follows:

"**Initiating Holders**" means: (i) any Holder or Holders who in the aggregate hold not less than forty percent (40%) of the Registrable Securities then outstanding and who propose to register securities, the aggregate offering price of which, net of underwriting discounts and commissions, is at least $5,000,000 and (ii) beginning on May 4, 2017, Juno to the extent Juno proposes to register either (A) securities, the aggregate offering price of which, net of underwriting discounts and commissions, exceeds $5,000,000, or (B) all Registrable Securities then held by Juno.

3. Definition of Registrable Securities. The definition of "Registrable Securities" as set forth in Section 1.1 of the Investor Rights Agreement is amended and restated to read in its entirety as follows:

"**Registrable Securities**" shall mean (i) Conversion Stock, other than shares for which registration rights have terminated pursuant to Section 1.15 hereof; (ii) any Common Stock of the Company issued as a dividend or other distribution with respect to or in exchange for or in replacement of the shares referenced in clause (i) above or clause (v) below; (iii) solely for the purposes of Sections 1.5 — 1.10, 1.13 — 1.15 and 4, the shares of Founders' Stock, (iv) solely for the purposes of Sections 1.3 — 1.10, 1.13 — 1.15 and 4, shares of the Company's Common Stock issued and issuable upon conversion of the shares of convertible preferred stock issued and issuable upon exercise or conversion of that certain Warrant to Purchase Stock issued to Silicon Valley Bank on January 5, 2009 and that certain Warrant to Purchase Stock issued to Silicon Valley Bank on August 25, 2011 (together, the "Warrants"), and the shares of Common Stock issued and issuable upon exercise or conversion of the Warrants at all times when the applicable Class (as defined in each of the Warrants) is Common Stock, except that the holder of the Warrants shall not be entitled to be an Initiating Holder, and (v) the shares of Common Stock issued to, or to be issued to, Juno, pursuant to that certain Stock Purchase Agreement by and between Juno and the Company, dated as of May 4, 2015 (the "Juno SPA"); *provided, however*, that shares of Common Stock or other securities shall only be treated as Registrable Securities if and so long as (A) they have not been sold to or through a broker or dealer or underwriter in a public distribution or a public securities transaction, (B) they have not been sold in a transaction exempt from the registration and prospectus delivery requirements of the Securities Act under Section 4(1) thereof so that all transfer restrictions and restrictive legends with respect thereto are removed upon the consummation of such sale, (C) they have not been transferred in a transaction pursuant to which the registration rights are not also assigned in accordance with Section 1.11 hereof, (D) with respect to each Holder other than Juno, all such shares held by such Holder could not be sold under Rule 144 of the Securities Act (or any similar or successor rule) during any one ninety (90) day period, or (E) with respect to Juno, all such shares held by Juno could not be sold under Rule 144 of the Securities Act (or any similar or successor rule) during any one ninety (90) day period or could not be sold without breaching the restrictions on transfer set forth in the June SPA (and assuming for the purposes of Rule 144 that Juno is subject to the volume limitations thereof as if Juno was an "affiliate" within the meaning of Rule 144); and *provided further* that any shares of Common Stock issued to Juno shall only be treated as Registrable Securities beginning on May 4, 2017."

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4. Restrictions. Section 1.2 of the Investor Rights Agreement shall not apply to Juno.

5. Request for Registration on Form S-3 by Juno. The limitation set forth in Section 1.4(b)(ii)(A) of the Investor Rights Agreement shall not apply to any registration requests initiated by Juno.

6. Termination of Rights. Section 1.15 of the Investor Rights Agreement is amended and restated to read in its entirety as follows:

"1.15 Termination of Rights. The rights of any particular Holder to cause the Company to register securities under Sections 1.3, 1.4, and 1.5 shall terminate with respect to such Holder after the earlier of (i) the fourth (4th) anniversary of the consummation of an IPO in which all Preferred Stock and all Notes are converted into Common Stock, (ii) with respect to any Holder, at such time after an IPO as Rule 144 or another similar exemption under the Securities Act is available for the sale of all of such Holder's shares during a three-month period without registration or (iii) upon termination of the Agreement as provided herein; *provided, however*, that, notwithstanding any of the foregoing and in lieu thereof, the rights of Juno shall terminate upon the earlier of (x) [***] or (y) such time as all such shares held by Juno become eligible for sale under Rule 144 of the Securities Act (or any similar or successor rule) during any one ninety (90) day period without registration and without breach of the restrictions set forth in the Juno SPA (and assuming for the purposes of Rule 144 that Juno is subject to the volume limitations thereof as if Juno were an "affiliate" within the meaning of Rule 144), and Juno shall have no rights to cause the Company to register securities under this Agreement to the extent that any such registration rights have been waived by existing Holders prior to the date of this Amendment with respect to offerings of securities by the Company that may be conducted pursuant to the Company's registration statement on Form S-3 (File No. 333-199107)."

7. Amendment and Waiver. In addition to the provisions set forth in Section 4.10 of the Investor Rights Agreement, the consent of Juno shall be required for any amendment to or waiver of any provision of the Investor Rights Agreement if such amendment or waiver would adversely affect the rights of Juno as set forth in this Amendment.

8. Amendment to Exhibit A. Exhibit A to the Investor Rights Agreement is hereby amended to include Juno as an Investor.

9. Effect of this Amendment. This Amendment shall form a part of the Investor Rights Agreement for all purposes, and each party thereto and hereto shall be bound hereby. From and after the execution of this Amendment by the parties hereto, any reference to the Investor Rights Agreement shall be deemed a reference to the Investor Rights Agreement as amended hereby. This amendment shall be deemed to be in full force and effect from and after the execution of this Amendment by the parties hereto. Except as specifically set forth herein,

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each term and condition of the Investor Rights Agreement shall continue in full force and effect. The Company represents to Juno that the execution of this Amendment by the Company, Polaris Venture Partners V, L.P., Polaris Venture Partners Founders' Fund V, L.P., Polaris Venture Partners Entrepreneurs' Fund V, L.P., Polaris Venture Partners Special Founders' Fund V, L.P., and Juno is sufficient to cause the effectiveness of the amendments to the Investor Rights Agreement contemplated hereby.

10. Governing Law. This Amendment shall be governed by and construed in accordance with the General Corporation Law of the State of Delaware as to matters within the scope thereof, and as to all other matters shall be governed by and construed in accordance with the internal laws of the State of California, without regard to conflict of law principles that would result in the application of any law other than the law of the State of California.

11. Counterparts; Electronic and Facsimile Signatures. This Amendment may be executed in any number of counterparts, each of which shall be deemed to be an original, but all of which together shall constitute one and the same instrument. This Amendment may be executed and delivered electronically (including by transmission of .pdf files) and by facsimile and, upon such delivery, such will be deemed to have the same effect as if the original signature had been delivered to the other party. Each of the Stockholders and Juno agree to deliver to the Company the original signature copy by express overnight delivery. However, the failure to deliver the original signature copy and/or the nonreceipt of the original signature copy shall have no effect upon the binding and enforceable nature of this Amendment.

[Signature Pages Follow]

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IN WITNESS WHEREOF, the parties have executed or otherwise consented to this Amendment as of the date first above written.

COMPANY:

FATE THERAPEUTICS, INC.

By: /s/ J. Scott Wolchko

Name: Scott Wolchko
(print)

Title: COO and CFO

Address: 3535 General Atomics Court
Suite 200
San Diego, CA 92121

* Confidential Information, indicated by [***], has been omitted from this filing and filed separately with the Securities and Exchange Commission.

AGREED AND APPROVED:

Polaris Venture Partners V, L.P.

By: Polaris Venture Management Co. V, LLC
Its: General Partner

By: /s/ John J Gannon
John J Gannon
Attorney In Fact

Address: 1000 Winter Street, Suite 3350
Waltham, MA 02451

Polaris Venture Partners Founders' Fund V, L.P.
By: Polaris Venture Management Co. V, LLC
Its: General Partner

By: /s/ John J Gannon
John J Gannon
Attorney In Fact

Address: 1000 Winter Street, Suite 3350
Waltham, MA 02451

Polaris Venture Partners Entrepreneurs' Fund V, L.P.
By: Polaris Venture Management Co. V, LLC
Its: General Partner

By: /s/ John J Gannon
John J Gannon
Attorney In Fact

Address: 1000 Winter Street, Suite 3350
Waltham, MA 02451

Polaris Venture Partners Special Founders' Fund V, L.P.
By: Polaris Venture Management Co. V, LLC
Its: General Partner

By: /s/ John J Gannon
John J Gannon
Attorney In Fact

Address: 1000 Winter Street, Suite 3350
Waltham, MA 02451

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JUNO THERAPEUTICS, INC.

By: /s/ Zachary D. Hale

Name: Zachary D. Hale
(print)

Title: VP and Associate GC

Address: 307 Westlake Ave N, Ste 300
Seattle, WA 98109

* Confidential Information, indicated by [***], has been omitted from this filing and filed separately with the Securities and Exchange Commission.

Exhibit 31.1

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
PURSUANT TO RULE 13a-14(a) AND 15d-14(a) OF THE SECURITIES EXCHANGE ACT, AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Christian Weyer, certify that:

1. I have reviewed this Amendment No. 1 to the quarterly report on Form 10-Q of Fate Therapeutics, Inc.; and

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report.

Date: November 6, 2015

/s/ Christian Weyer
Christian Weyer
President and Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER
PURSUANT TO RULE 13a-14(a) AND 15d-14(a) OF THE SECURITIES EXCHANGE ACT, AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, J. Scott Wolchko, certify that:

1. I have reviewed this Amendment No. 1 to the quarterly report on Form 10-Q of Fate Therapeutics, Inc.; and

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report.

Date: November 6, 2015

/s/ J. Scott Wolchko
J. Scott Wolchko
Chief Financial Officer and Chief Operating Officer
(Principal Financial Officer)

Exhibit 32.1

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with this Amendment No. 1 to the quarterly report of Fate Therapeutics, Inc. (the "Company") on Form 10-Q for the period ended June 30, 2015 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Christian Weyer, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: November 6, 2015

/s/ Christian Weyer
Christian Weyer
President and Chief Executive Officer

The foregoing certification is being furnished solely pursuant to 18 U.S.C. Section 1350 and is not being filed as part of the Report or as a separate disclosure document.

Exhibit 32.2

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with this Amendment No. 1 to the quarterly report of Fate Therapeutics, Inc. (the "Company") on Form 10-Q for the period ended June 30, 2015, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, J. Scott Wolchko, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: November 6, 2015

/s/ J. Scott Wolchko
J. Scott Wolchko
Chief Financial Officer and Chief Operating Officer

The foregoing certification is being furnished solely pursuant to 18 U.S.C. Section 1350 and is not being filed as part of the Report or as a separate disclosure document.