

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

**FORM 10-K/A
(Amendment No. 1)**

(Mark One)

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

For the fiscal year ended December 31, 2018

OR

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

For the transition period from _____ to _____

Commission File Number: 001-38586

RUBIUS THERAPEUTICS, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

46-2688109
(I.R.S. Employer
Identification No.)

399 Binney Street, Suite 300
Cambridge, Massachusetts
(Address of principal executive offices)

02139
(Zip code)

(617) 679-9600

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol	Name of exchange on which registered
Common Stock, \$0.001 Par Value	RUBY	NASDAQ Global Select Market

Securities registered pursuant to Section 12(g) of the Act:

None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

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 every Interactive Data File required to be submitted 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 such files). Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

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

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
		Emerging growth company	<input checked="" type="checkbox"/>

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

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 June 29, 2018, the last business day of the registrant's most recently completed second fiscal quarter, there was no established public market for the registrant's common stock. The registrant's common stock began trading on the NASDAQ Global Select Market on July 18, 2018. The aggregate market value of common stock held by non-affiliates of the registrant computed by reference to the price of the registrant's common stock as of July 18, 2018 (based on the last reported sale price on the NASDAQ Global Select Market as of such date) was \$718.9 million.

As of February 28, 2019, the registrant had 79,529,965 shares of common stock, \$0.001 par value per share, outstanding.

EXPLANATORY NOTE

Rubius Therapeutics, Inc. (the “Company”) hereby amends its Annual Report on Form 10-K for the year ended December 31, 2018 (the “Annual Report”), originally filed with the Securities and Exchange Commission (the “SEC”) on March 28, 2019, through the filing of this Amendment No. 1 (this “Amendment”) solely for the purpose of re-filing Exhibits 10.11.1 and 10.12.1 (together, the “Exhibits”) in accordance with guidance published by the staff (the “Staff”) of the SEC relating to the filing of redacted material contracts without applying for confidential treatment of the redacted information (the “Staff Guidance”), as provided for in the SEC’s Release No. 33-10618, which became effective on April 2, 2019, and the amendments to Form 10-K provided for therein (the “New CT Rules”). In accordance with the Staff Guidance, the Company has withdrawn its pending confidential treatment application with respect to the Exhibits and is, through the filing of this Amendment, re-filing the Exhibits in accordance with the requirements of the New CT Rules. The footnotes to the index of exhibits included in this Amendment have also been revised to distinguish exhibits that reflect omissions pursuant to confidential treatment orders previously granted by the Staff and omissions made in accordance with the New CT Rules.

Except for the revised Exhibits, this Amendment does not amend, update or restate any other items or sections of the Annual Report and does not reflect events occurring after the original filing date of the Annual Report.

In connection with the filing of this Amendment, the Company is including certifications of the Company’s Chief Executive Officer and Chief Financial Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended. The Company is not including certifications pursuant to Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. 1350) as no financial statements are being filed with this Amendment.

PART IV.

Item 15. Exhibits and Financial Statement Schedules

(a) The following documents are included as part of the Annual Report filed with the SEC on March 28, 2019:

1. *Financial Statements*

See Index to the Consolidated Financial Statements on page 147 of the Annual Report.

2. *Financial Statement Schedules*

Financial statement schedules have been omitted because they are either not required or not applicable or the information is included in the consolidated financial statements or the notes thereto.

3. *Exhibits*

The exhibits listed below are filed or incorporated by reference in this Amendment.

(b) **Exhibit Index**

EXHIBIT INDEX

- 3.1 [Amended and Restated Certificate of Incorporation of Rubius Therapeutics, Inc. \(Incorporated by reference to Exhibit 3.1 to the Registrant's Form 8-K \(File No. 001-38586\) filed on July 23, 2018\).](#)
 - 3.2 [Amended and Restated Bylaws of Rubius Therapeutics, Inc. \(Incorporated by reference to Exhibit 3.2 to the Registrant's Form 8-K \(File No. 001-38586\) filed on July 23, 2018\).](#)
 - 4.1 [Specimen Common Stock Certificate \(Incorporated by reference to Exhibit 4.1 to the Registrant's Registration Statement on Form S-1, as amended \(File No. 333-225840\) filed on July 2, 2018\).](#)
 - 4.2 [Second Amended and Restated Investors' Rights Agreement among the Registrant and certain of its stockholders, dated February 23, 2018 \(Incorporated by reference to Exhibit 4.2 to the Registrant's Registration Statement on Form S-1 \(File No. 333-225840\) filed on June 22, 2018\).](#)
 - 10.1# [Amended and Restated 2014 Stock Incentive Plan, and form of award agreements thereunder \(Incorporated by reference to Exhibit 10.1 to the Registrant's Registration Statement on Form S-1 \(File No. 333-225840\) filed on June 22, 2018\).](#)
 - 10.2# [2018 Stock Option and Incentive Plan, and form of award agreements thereunder \(Incorporated by reference to Exhibit 10.2 to the Registrant's Registration Statement on Form S-1, as amended \(File No. 333-225840\) filed on July 9, 2018\).](#)
 - 10.2# [2018 Employee Stock Purchase Plan \(Incorporated by reference to Exhibit 10.3 to the Registrant's Registration Statement on Form S-1, as amended \(File No. 333-225840\) filed on July 9, 2018\).](#)
 - 10.3# [Senior Executive Cash Incentive Bonus Plan \(Incorporated by reference to Exhibit 10.4 to the Registrant's Registration Statement on Form S-1 \(File No. 333-225840\) filed on June 22, 2018\).](#)
 - 10.3# [Non-Employee Director Compensation Policy \(Incorporated by reference to Exhibit 10.5 to the Registrant's Registration Statement on Form S-1, as amended \(File No. 333-225840\) filed on July 2, 2018\).](#)
 - 10.4# [Employment Agreement between Rubius Therapeutics, Inc. and Pablo J. Cagnoni, M.D., dated July 2, 2018 \(Incorporated by reference to Exhibit 10.6 to the Registrant's Registration Statement on Form S-1, as amended \(File No. 333-225840\) filed on July 9, 2018\).](#)
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- 10.5# [Employment Agreement between Rubius Therapeutics, Inc. and Torben Straight Nissen, Ph.D., dated July 2, 2018 \(Incorporated by reference to Exhibit 10.7 to the Registrant's Registration Statement on Form S-1, as amended \(File No. 333-225840\) filed on July 9, 2018\).](#)
- 10.6# [Employment Agreement between Rubius Therapeutics, Inc. and Andrew M. Oh, dated June 29, 2018 \(Incorporated by reference to Exhibit 10.8 to the Registrant's Registration Statement on Form S-1, as amended \(File No. 333-225840\) filed on July 9, 2018\).](#)
- 10.7# [Employment Agreement between Rubius Therapeutics, Inc. and Christopher L. Carpenter, M.D., Ph.D., dated June 29, 2018 \(Incorporated by reference to Exhibit 10.9 to the Registrant's Registration Statement on Form S-1, as amended \(File No. 333-225840\) filed on July 9, 2018\).](#)
- 10.8# [Second Amended and Restated Chairman Agreement between Rubius Therapeutics, Inc. and David R. Epstein, dated June 21, 2018 \(Incorporated by reference to Exhibit 10.10 to the Registrant's Registration Statement on Form S-1 \(File No. 333-225840\) filed on June 22, 2018\).](#)
- 10.9# [Form of Indemnification Agreement between Rubius Therapeutics, Inc. and each of its directors \(Incorporated by reference to Exhibit 10.14 to the Registrant's Registration Statement on Form S-1 \(File No. 333-225840\) filed on June 22, 2018\).](#)
- 10.10# [Form of Indemnification Agreement between Rubius Therapeutics, Inc. and each of its executive officers \(Incorporated by reference to Exhibit 10.15 to the Registrant's Registration Statement on Form S-1 \(File No. 333-225840\) filed on June 22, 2018\).](#)
- 10.11^ [Lease Agreement between Rubius Therapeutics, Inc. and ARE-MA Region No. 58 LLC, dated January 18, 2018 \(Incorporated by reference to Exhibit 10.11 to the Registrant's Registration Statement on Form S-1 \(File No. 333-225840\) filed on June 22, 2018\).](#)
- 10.11.1**^ [First Amendment to Lease Agreement between Rubius Therapeutics, Inc. and ARE-MA Region No. 58 LLC, dated November 8, 2018.](#)
- 10.12^ [Exclusive Patent License Agreement between the Registrant and the Whitehead Institute for Biomedical Research, dated January 28, 2016 and First Amendment to the Exclusive Patent License Agreement between the Registrant and the Whitehead Institute for Biomedical Research, dated December 12, 2017 \(Incorporated by reference to Exhibit 10.13 to the Registrant's Registration Statement on Form S-1 \(File No. 333-225840\) filed on June 22, 2018\).](#)
- 10.12.1**^ [Second Amendment to the Exclusive Patent License Agreement between the Registrant and the Whitehead Institute for Biomedical Research, dated July 25, 2018.](#)
- 10.13 [Purchase and Sale Agreement between Rubius Therapeutics, Inc. and Alexion Pharmaceuticals, Inc., dated July 23, 2018 \(Incorporated by reference to Exhibit 10.1 to the Registrant's Form 8-K \(File No. 001-38586\) filed on July 25, 2018\).](#)
- 10.14 [Loan and Security Agreement between Rubius Therapeutics, Inc. and Solar Capital Ltd, dated December 21, 2018 \(Incorporated by reference to Exhibit 10.1 to the Registrant's Form 8-K \(File No. 001-38586\) filed on December 21, 2018\).](#)
- 21.1 [List of Subsidiaries of Rubius Therapeutics, Inc. \(Incorporated by reference to Exhibit 21.1 to the Registrant's Annual Report on Form 10-K \(File No. 001-38586\) filed on March 28, 2019\).](#)
- 23.1 [Consent of PricewaterhouseCoopers LLP, independent registered public accounting firm \(Incorporated by reference to Exhibit 23.1 to the Registrant's Annual Report on Form 10-K \(File No. 001-38586\) filed on March 28, 2019\).](#)
- 24.1 [Power of Attorney \(Incorporated by reference to Exhibit 24.1 to the Registrant's Annual Report on Form 10-K \(File No. 001-38586\) filed on March 28, 2019\).](#)
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31.1	<u>Certification of Principal Executive Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (Incorporated by reference to Exhibit 31.1 to the Registrant's Annual Report on Form 10-K (File No. 001-38586) filed on March 28, 2019).</u>
31.2	<u>Certification of Principal Financial Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (Incorporated by reference to Exhibit 31.2 to the Registrant's Annual Report on Form 10-K (File No. 001-38586) filed on March 28, 2019).</u>
31.3*	<u>Certification of Principal Executive Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</u>
31.4*	<u>Certification of Principal Financial Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</u>
32.1†	<u>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 (Incorporated by reference to Exhibit 32.1 to the Registrant's Annual Report on Form 10-K (File No. 001-38586) filed on March 28, 2019).</u>
32.2†	<u>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 (Incorporated by reference to Exhibit 32.2 to the Registrant's Annual Report on Form 10-K (File No. 001-38586) filed on March 28, 2019).</u>
101.INS	XBRL Instance Document (Incorporated by reference to Exhibit 101.INS to the Registrant's Annual Report on Form 10-K (File No. 001-38586) filed on March 28, 2019).
101.SCH	XBRL Taxonomy Extension Schema Document (Incorporated by reference to Exhibit 101.SCH to the Registrant's Annual Report on Form 10-K (File No. 001-38586) filed on March 28, 2019).
101.CAL	XBRL Taxonomy Calculation Linkbase Document (Incorporated by reference to Exhibit 101.CAL to the Registrant's Annual Report on Form 10-K (File No. 001-38586) filed on March 28, 2019).
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document (Incorporated by reference to Exhibit 101.DEF to the Registrant's Annual Report on Form 10-K (File No. 001-38586) filed on March 28, 2019).
101.LAB	XBRL Taxonomy Extension Label Linkbase Document (Incorporated by reference to Exhibit 101.LAB to the Registrant's Annual Report on Form 10-K (File No. 001-38586) filed on March 28, 2019).
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document (Incorporated by reference to Exhibit 101.PRE to the Registrant's Annual Report on Form 10-K (File No. 001-38586) filed on March 28, 2019).

* Filed herewith.

Indicates a management contract or any compensatory plan, contract or arrangement.

^ Confidential treatment has been granted with respect to redacted portions of this exhibit. Redacted portions of this exhibit have been filed separately with the Securities and Exchange Commission.

^^ Portions of this exhibit (indicated by asterisks) have been omitted in accordance with the rules of the Securities and Exchange Commission.

† This certification will not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liability of that section. Such certification will not be deemed to be incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Exchange Act, except to the extent specifically incorporated by reference into such filing.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) 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.

Date: May 15, 2019

RUBIUS THERAPEUTICS, INC.

By: /s/ Pablo J. Cagnoni

Pablo J. Cagnoni
Chief Executive Officer

CERTAIN INFORMATION IDENTIFIED BY BRACKETED ASTERISKS ([* * *]) HAS BEEN OMITTED FROM THIS EXHIBIT BECAUSE IT IS BOTH NOT MATERIAL AND WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED.

FIRST AMENDMENT TO LEASE

THIS FIRST AMENDMENT TO LEASE (this "**First Amendment**") is made as of November 8, 2018, by and between **ARE-MA REGION NO. 58, LLC**, a Delaware limited liability company ("**Landlord**"), and **RUBIUS THERAPEUTICS, INC.**, a Delaware corporation ("**Tenant**").

RECITALS

A . Landlord and Tenant are now parties to that certain Lease Agreement dated as January 18, 2018 (the "**Lease**"). Pursuant to the Lease, Tenant leases certain premises consisting of approximately 48,192 rentable square feet ("**Original Premises**") in that certain to-be-constructed building to be known as 399 Binney Street, Cambridge, Massachusetts (the "**Building**"). The Original Premises are more particularly described in the Lease. Capitalized terms used herein without definition shall have the meanings defined for such terms in the Lease.

B . Landlord and Tenant desire, subject to the terms and conditions set forth below, to amend the Lease to, among other things, expand the size of the Original Premises by adding approximately 37,742 rentable square feet of space, consisting of (i) that portion of the first floor of the Building containing approximately 7,423 rentable square feet (the "**First Floor Space**"), and (ii) that portion of lower level of the Building containing approximately 30,319 rentable square feet, all as shown on **Exhibit A** attached to this First Amendment (collectively, the "**Expansion Premises**").

NOW, THEREFORE, in consideration of the foregoing Recitals, which are incorporated herein by this reference, the mutual promises and conditions contained herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Landlord and Tenant hereby agree as follows:

- 1 . **Expansion Premises.** In addition to the Original Premises, commencing on the Expansion Premises Commencement Date (as defined below), Landlord leases to Tenant, and Tenant leases from Landlord, the Expansion Premises, subject to all of the same terms and conditions of the Lease as are applicable to the Original Premises (except as otherwise provided in this First Amendment).
- 2 . **Delivery of Expansion Premises.** Landlord shall use reasonable efforts to deliver the Expansion Premises to Tenant so that Tenant can occupy the Expansion Premises for the Permitted Use ("**Delivery**" or "**Deliver**") with (x) all base Building mechanical, electrical and plumbing systems serving the Expansion Premises in good operating condition and repair, and (y) free and clear of all tenants and occupants, on or before the Target Expansion Premises Commencement Date with Landlord's Work in the Expansion Premises Substantially Completed, subject to Tenant Delays and Force Majeure delays. If Landlord fails to timely Deliver the Expansion Premises, Landlord shall not be liable to Tenant for any loss or damage resulting therefrom, and the Lease and this First Amendment shall not be void or voidable. Notwithstanding anything to the contrary contained herein, if Landlord fails to Deliver the Expansion Premises to Tenant (i) on or before September 1, 2019 (as such date may be extended for Tenant Delays and Force Majeure delays) ("**Initial Expansion Abatement Date**"), Base Rent payable with respect to the Expansion Premises shall be abated 1 day for each day after the Initial Expansion Abatement Date (as such date may be extended for Tenant Delays and Force Majeure delays) that Landlord fails to Deliver the Expansion Premises to Tenant, and (ii) on or before October 1, 2019 (as such date may be extended for Tenant Delays and Force Majeure delays) ("**Second Expansion Abatement Date**"), Base Rent payable with respect to the Expansion Premises shall be abated 2 days for each day after the Second Expansion Abatement Date (as such date may be extended for Tenant Delays and Force



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Majeure delays) that Landlord fails to Deliver the Expansion Premises to Tenant. If Landlord does not Deliver the Expansion Premises on or before December 1, 2019, for any reason other than Force Majeure delays and Tenant Delays, the Lease with respect to the Expansion Premises only may be terminated by Tenant by written notice to Landlord, and if so terminated by Tenant: (a) all of the provisions of this First Amendment shall terminate and be of no further force or effect, and (b) neither Landlord nor Tenant shall have any further rights, duties or obligations under the Lease with respect to the Expansion Premises, except with respect to provisions which expressly survive termination of the Lease. If Tenant does not elect to terminate the Lease with respect to the Expansion Premises on or before December 6, 2019, such right to terminate the Lease with respect to the Expansion Premises shall be waived and the Lease with respect to the Expansion Premises shall remain in full force and effect. As used herein, the terms "**Landlord's Work**," "**Tenant Delays**" and "**Substantially Completed**" shall have the meanings set forth for such terms in the work letter attached to this First Amendment as **Exhibit B** ("**Expansion Premises Work Letter**"). The Work Letter attached to the Lease as **Exhibit C** does not apply with respect to the Expansion Premises.

The "**Expansion Premises Commencement Date**" shall be the earlier to occur of: (i) the date that Landlord Delivers the Expansion Premises to Tenant, or (ii) the date that Landlord could have Delivered the Expansion Premises to Tenant but for Tenant Delays. The "**Target Expansion Premises Commencement Date**" shall be August 1, 2019.

Except as set forth in the Expansion Premises Work Letter: (i) Tenant shall accept the Expansion Premises in their condition as of the Expansion Premises Commencement Date, subject to all applicable Legal Requirements; (ii) Landlord shall have no obligation for any defects in the Expansion Premises; and (iii) Tenant's taking possession of the Expansion Premises shall be conclusive evidence that Tenant accepts the Expansion Premises and that the Expansion Premises were in good condition at the time possession was taken. Any occupancy of the Expansion Premises by Tenant before the Expansion Premises Commencement Date shall be subject to all of the terms and conditions of the Lease, including the obligation to pay Base Rent and Operating Expenses. Notwithstanding the foregoing, Base Rent and Operating Expenses shall not be payable during the period that Tenant is accessing the Expansion Premises to perform Tenant's Work (as defined in the Expansion Premises Work Letter) pursuant to Section 6 of the Expansion Premises Work Letter and not for the conduct of Tenant's business in the Expansion Premises.

Tenant agrees and acknowledges that, except as otherwise expressly set forth in this First Amendment, neither Landlord nor any agent of Landlord has made any representation or warranty with respect to the condition of all or any portion of the Expansion Premises, and/or the suitability of the Expansion Premises for the conduct of Tenant's business, and Tenant waives any implied warranty that the Expansion Premises are suitable for the Permitted Use.

- 3 . **Premises: Rentable Area of Premises.** Commencing on the Expansion Premises Commencement Date, the defined terms "**Premises**" and "**Rentable Area of Premises**" on page 1 of the Lease shall be deleted in their entirety and replaced with the following:

"Premises: That portion of the Building containing approximately 85,934 rentable square feet, consisting of (i) the entire 3rd floor, containing approximately 47,136 rentable square feet (the "**Third Floor Space**"), (ii) a portion of the 4th floor, containing approximately 1,056 rentable square feet (the "**Fourth Floor Space**"), (iii) a portion of the first floor, containing approximately 7,423 rentable square feet (the "**First Floor Space**"), and (iv) a portion of the lower level, containing approximately 30,319 rentable square feet (the "**Lower Level Space**"), all as shown on **Exhibit A.**"



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"Rentable Area of Premises: 85,934 sq. ft."

As of the Expansion Premises Commencement Date, **Exhibit A** to the Lease shall be amended to include the Expansion Premises as shown on **Exhibit A** attached to this First Amendment.

4. **Base Rent.**

a. **Original Premises.** Tenant shall continue to pay Base Rent with respect to the Original Premises as provided for under the Lease through the Original Premises Expiration Date (as defined below).

b. **First Floor Space.** Commencing on the Expansion Premises Commencement Date, Tenant shall pay Base Rent with respect to the First Floor Space in the amount of \$[***] per rentable square foot of the First Floor Space per year. On each anniversary of the Expansion Premises Commencement Date, (each, an "**Expansion Premises Adjustment Date**"), Base Rent payable with respect to the First Floor Space shall be increased by multiplying the Base Rent payable with respect to the First Floor Space immediately before such Expansion Premises Adjustment Date by [***]% and adding the resulting amount to the Base Rent payable with respect to the First Floor Space immediately prior to such Expansion Premises Adjustment Date. Base Rent adjustments for the First Floor Space for any fractional calendar month shall be prorated.

c. **Lower Level Space.** Commencing on the Expansion Premises Commencement Date, Tenant shall pay Base Rent with respect to the Lower Level Space in the amount of \$[***] per rentable square foot of the Lower Level Space per year. On each Expansion Premises Adjustment Date, Base Rent payable with respect to the Lower Level Space shall be increased by multiplying the Base Rent payable with respect to the Lower Level Space immediately before such Expansion Premises Adjustment Date by [***]% and adding the resulting amount to the Base Rent payable with respect to the Lower Level Premises immediately prior to such Expansion Premises Adjustment Date. Base Rent adjustments for the Lower Level Space for any fractional calendar month shall be prorated.

d. **Additional TI Allowance.** In addition to the Tenant Improvement Allowance (as defined in the Expansion Premises Work Letter), Landlord shall, subject to the terms of the Expansion Premises Work Letter, make available to Tenant the Additional TI Allowance (as defined in the Expansion Premises Work Letter). Commencing on the Expansion Premises Commencement Date and continuing thereafter on the first day of each month through the Expansion Premises Expiration Date, Tenant shall pay the amount necessary to fully amortize the portion of the Additional TI Allowance (as defined in the Expansion Premises Work Letter) actually funded by Landlord, if any, in equal monthly payments with annual interest at a rate of 8% per annum over the Base Term, which interest shall begin to accrue on the date that Landlord first disburses such Additional TI Allowance (as defined in the Expansion Premises Work Letter) or any portion(s) thereof ("**Expansion Premises TI Rent**"). Any of the Additional TI Allowance (as defined in the Expansion Premises Work Letter) and applicable interest remaining unpaid as of the Expansion Premises Expiration Date or earlier termination of the Lease shall be paid to Landlord in a lump sum on the Expansion Premises Expiration Date or earlier termination of this Lease. Tenant, at Tenant's option, may prepay the Expansion Premises TI Rent in full at any time without penalty.

5 . **Tenant's Share.** Commencing on the Expansion Premises Commencement Date, the defined term "**Tenant's Share**" on page 1 of the Lease shall be deleted in its entirety and replaced with the following:



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"Tenant's Share: 52.02%"

6. **Base Term.** Commencing on the date of this First Amendment, the defined term "**Base Term**" on page 1 of the Lease shall be deleted in its entirety and replaced with the following:

"**Base Term.** Beginning on (i) the Commencement Date with respect to the Original Premises, and ending with respect to the Original Premises on the date that is 96 months from the first day of the first full month following the Commencement Date (the "**Original Premises Expiration Date**"), and (ii) the Expansion Premises Commencement Date with respect to the Expansion Premises, and ending with respect to the Expansion Premises on the date that is 108 months after the first day of the first month following the Expansion Premises Commencement Date (the "**Expansion Premises Expiration Date**").

If Tenant does not extend the Term of the Lease pursuant to Section 40 of the Lease (as amended by Section 9 of this First Amendment), then on the day immediately following the Expansion Premises Expiration Date, the definitions of "**Premises**," "**Rentable Area of Premises**" and "**Tenant's Share**" shall be adjusted to account for the expiration of the Lease with respect to the Original Premises. Otherwise, on the day immediately following the Expansion Premises Expiration Date, the definitions of "**Premises**," "**Rentable Area of Premises**" and "**Tenant's Share**" shall be adjusted to account for the expiration of the Lease with respect to the Expansion Premises.

7. **Security Deposit.** Commencing on the date of this First Amendment, the defined term "**Security Deposit**" on Page 1 of the Lease is deleted in its entirety and replaced with the following:

"**Security Deposit:** \$[***]"

Landlord currently holds a Security Deposit of \$[***] under the Lease. Concurrently with Tenant's delivery of a signed original of this First Amendment to Landlord, Tenant shall deliver to Landlord an amended Letter of Credit which increases the amount of the existing Letter of Credit being held by Landlord to \$[***] or an additional Letter of Credit in the amount of \$[***].

8. **Parking.** Commencing on the Expansion Premises Commencement Date, subject to the terms of Section 10 of the Lease, in addition to Tenant's Parking Allocation, Tenant shall have the right, in common with other tenants of the Project to use 0.9 parking spaces per 1,000 rentable square feet of the Expansion Premises ("**Tenant's Expansion Premises Parking Allocation**") in the OKS Garage to park in those areas designated for non-reserved parking, subject in each case to Landlord's rules and regulations and Tenant's payment of the Monthly Parking Charges with respect to each parking space. Tenant has elected to use all of Tenant's Expansion Premises Parking Allocation commencing on the Expansion Premises Commencement Date. As of the date of this First Amendment, the Monthly Parking Charge is \$[***] per parking space per month, plus applicable taxes.

9. **Right to Extend Term.** Notwithstanding anything to the contrary contained in the Lease, (a) Tenant shall only have the right to exercise its Extension Right under Section 40 of the Lease with respect to the entire Premises (i.e., the Original Premises and the Expansion Premises), (b) if Tenant exercises its Extension Right pursuant to Section 40, then, (i) the Term of the Lease with respect to the Original Premises will be extended for an additional 60 months following the Original Premises Expiration Date ("**Extended Original Premises Expiration Date**"), and (ii) the Term of the Lease with respect to the Expansion Premises will be extended from the Expansion Premises Expiration Date through the Extended Original Premises Expiration Date, such that the Term of the



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Lease with respect to the Original Premises and the Expansion Premises will expire concurrently. Commencing on the day immediately following the Expansion Premises Expiration Date, Tenant shall commence paying Base Rent on a per rentable square foot basis with respect to the Expansion Premises at the same Base Rent per rentable square foot that Tenant is then paying with respect to the Original Premises (as determined and as adjusted pursuant to Section 40 of the Lease). For the avoidance of doubt, Tenant shall continue to pay Base Rent as required under this First Amendment with respect to the Expansion Premises through the Expansion Premises Expiration Date.

10. **Brokers.** Landlord and Tenant each represents and warrants that it has not dealt with any broker, agent or other person (collectively, "**Broker**") in connection with the transaction reflected in this First Amendment and that no Broker brought about this transaction, other than Newmark Knight Frank. Landlord and Tenant each hereby agrees to indemnify and hold the other harmless from and against any claims by any Broker, other than Newmark Knight Frank, claiming a commission or other form of compensation by virtue of having dealt with Tenant or Landlord, as applicable, with regard to this First Amendment.
11. **OFAC.** Tenant and, to Tenant's knowledge, all beneficial owners of Tenant are currently (a) in compliance with and shall at all times during the Term of the Lease remain in compliance with the regulations of the Office of Foreign Assets Control ("**OFAC**") of the U.S. Department of Treasury and any statute, executive order, or regulation relating thereto (collectively, the "**OFAC Rules**"), (b) not listed on, and shall not during the Term of the Lease be listed on, the Specially Designated Nationals and Blocked Persons List, Foreign Sanctions Evaders List, or the Sectoral Sanctions Identification List, which are all maintained by OFAC and/or on any other similar list maintained by OFAC or other governmental authority pursuant to any authorizing statute, executive order, or regulation, and (c) not a person or entity with whom a U.S. person is prohibited from conducting business under the OFAC Rules.
12. **Miscellaneous.**
 - a . This First Amendment is the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior and contemporaneous oral and written agreements and discussions. This First Amendment may be amended only by an agreement in writing, signed by the parties hereto.
 - b. This First Amendment is binding upon and shall inure to the benefit of the parties hereto, and their respective successors and assigns.
 - c . This First Amendment may be executed in 2 or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signature process complying with the U.S. federal E-SIGN Act of 2000) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes. Electronic signatures shall be deemed original signatures for purposes of this First Amendment and all matters related thereto, with such electronic signatures having the same legal effect as original signatures.
 - d. Except as amended and/or modified by this First Amendment, the Lease is hereby ratified and confirmed and all other terms of the Lease shall remain in full force and effect, unaltered and unchanged by this First Amendment. In the event of any conflict between the provisions of this First Amendment and the provisions of the Lease, the provisions of this First Amendment shall

prevail. Whether or not specifically amended by this First Amendment, all of the terms and provisions of the Lease are hereby amended to the extent necessary to give effect to the purpose and intent of this First Amendment.

[Signatures are on next page]



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IN WITNESS WHEREOF, the parties hereto have executed this First Amendment as of the day and year first above written.

TENANT:

RUBIUS THERAPEUTICS, INC.,
a Delaware corporation

By: /s/ Joanne M. Protano
Print
Name: Joanne M. Protano
Title: SVP Finance and Secretary

LANDLORD:

ARE-MA REGION NO. 58, LLC,
a Delaware limited liability company

BY: ALEXANDRIA REAL ESTATE EQUITIES, L.P.,
a Delaware limited partnership,
managing member

By: ARE-QRS CORP.,
a Maryland corporation,
general partner

By: /s/ Jackie Clem
Print Name: Senior Vice President
Title: RE Legal Affairs



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EXHIBIT A

Expansion Premises

[***].



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EXHIBIT B

Expansion Premises Work Letter

THIS **EXPANSION PREMISES WORK LETTER** (this "**Expansion Premises Work Letter**") is made by and between **ARE-MA REGION NO. 59, LLC**, a Delaware limited liability company ("**Landlord**"), and **RUBIUS THERAPEUTICS, INC.**, a Delaware corporation ("**Tenant**"), and is attached to and made a part of that certain Lease Agreement dated as of January 18, 2018, as amended by that certain First Amendment to Lease Agreement dated of even date herewith (the "**First Amendment**") (as amended, the "**Lease**"), by and between Landlord and Tenant. Any initially capitalized terms used but not defined herein shall have the meanings given them in the Lease.

1. **General Requirements.**

(a) **Tenant's Authorized Representative.** Tenant designates Joanne Protano and Torben Straight Nissen (either such individual acting alone, "**Tenant's Representative**") as the only persons authorized to act for Tenant pursuant to this Expansion Premises Work Letter. Landlord shall not be obligated to respond to or act upon any request, approval, inquiry or other communication ("**Communication**") from or on behalf of Tenant in connection with this Expansion Premises Work Letter unless such Communication is in writing from Tenant's Representative. Tenant may change either Tenant's Representative at any time upon not less than 5 business days advance written notice to Landlord. Neither Tenant nor Tenant's Representative shall be authorized to direct Landlord's contractors in the performance of Landlord's Work (as hereinafter defined).

(b) **Landlord's Authorized Representative.** Landlord designates William DePippo and Tim White (either such individual acting alone, "**Landlord's Representative**") as the only persons authorized to act for Landlord pursuant to this Expansion Premises Work Letter. Tenant shall not be obligated to respond to or act upon any request, approval, inquiry or other Communication from or on behalf of Landlord in connection with this Expansion Premises Work Letter unless such Communication is in writing from Landlord's Representative. Landlord may change either Landlord's Representative at any time upon not less than 5 business days advance written notice to Tenant. Landlord's Representative shall be the sole persons authorized to direct Landlord's contractors in the performance of Landlord's Work.

(c) **Architects, Consultants and Contractors.** Landlord and Tenant hereby acknowledge and agree that: (i) The Richmond Group shall be the general contractor (the "**General Contractor**") for the Tenant Improvements, (ii) Perkins & Will shall be the architect (the "**TI Architect**") for the Tenant Improvements, and (iii) any subcontractors for the Tenant Improvements shall be selected by Landlord, subject to Tenant's approval, which approval shall not be unreasonably withheld, conditioned or delayed. Landlord shall contract with the TI Architect and the General Contractor for the design and construction of Landlord's Work.

2. **Tenant Improvements.**

(a) **Tenant Improvements Defined.** As used herein, "**Tenant Improvements**" shall mean all improvements to the Expansion Premises of a fixed and permanent nature as shown on the TI Construction Drawings, as defined in Section 2(c) below. Other than Landlord's Work (as defined in Section 3(a)) below, Landlord shall not have any obligation whatsoever with respect to the finishing of the Expansion Premises for Tenant's use and occupancy.

(b) **Tenant's Space Plans.** Tenant shall deliver to Landlord and the TI Architect schematic drawings and outline specifications (the "**TI Design Drawings**") detailing Tenant's requirements for the Tenant Improvements within 5 business days of the date hereof. Not more than 5 business days thereafter,

Landlord shall deliver to Tenant the written objections, questions or comments of Landlord and the TI Architect with regard to the TI Design Drawings. Tenant shall cause the TI Design Drawings to be revised to address such written comments and shall resubmit said drawings to Landlord for approval within 5 business days thereafter. Such process shall continue until Landlord has approved the TI Design Drawings. It is hereby acknowledged by Landlord and Tenant that the TI Design Drawings must be completed and approved not later than January 15, 2019, in order for the Landlord's Work to be Substantially Complete by the Target Expansion Premises Commencement Date (as defined in the First Amendment).

(c) **Working Drawings.** Landlord shall cause the TI Architect to prepare and deliver to Tenant for review and comment construction plans, specifications and drawings for the Tenant Improvements ("**TI Construction Drawings**"), which TI Construction Drawings shall be prepared substantially in accordance with the TI Design Drawings. Tenant shall be solely responsible for ensuring that the TI Construction Drawings reflect Tenant's requirements for the Tenant Improvements. Tenant shall deliver its written comments on the TI Construction Drawings to Landlord not later than 10 business days after Tenant's receipt of the same; provided, however, that Tenant may not disapprove any matter that is consistent with the TI Design Drawings without submitting a Change Request. Landlord and the TI Architect shall consider all such comments in good faith and shall, within 10 business days after receipt, notify Tenant how Landlord proposes to respond to such comments, but Tenant's review rights pursuant to the foregoing sentence shall not delay the design or construction schedule for the Tenant Improvements. Any disputes in connection with such comments shall be resolved in accordance with Section 2(d) hereof. Provided that the design reflected in the TI Construction Drawings is consistent with the TI Design Drawings, Tenant shall approve in writing the TI Construction Drawings submitted by Landlord, unless Tenant submits a Change Request. Once approved by Tenant, subject to the provisions of Section 4 below, Landlord shall not materially modify the TI Construction Drawings except as may be reasonably required in connection with the issuance of the TI Permit (as defined in Section 3(b) below).

(d) **Approval and Completion.** It is hereby acknowledged by Landlord and Tenant that the TI Construction Drawings must be completed and approved not later than February 22, 2019, in order for the Landlord's Work to be Substantially Complete by the Target Expansion Premises Commencement Date. Upon any dispute regarding the design of the Tenant Improvements, which is not settled within 10 business days after notice of such dispute is delivered by one party to the other, Tenant may make the final decision regarding the design of the Tenant Improvements, provided (i) Tenant acts reasonably and such final decision is either consistent with or a compromise between Landlord's and Tenant's positions with respect to such dispute, (ii) that all costs and expenses resulting from any such decision by Tenant shall be payable out of the TI Fund (as defined in Section 5(e) below), and (iii) Tenant's decision will not affect the base Building, structural components of the Building or any Building systems. Any changes to the TI Construction Drawings following Landlord's and Tenant's approval of same requested by Tenant shall be processed as provided in Section 4 hereof.

3. **Performance of Landlord's Work.**

(a) **Definition of Landlord's Work.** As used herein, "**Landlord's Work**" shall mean the work of constructing the Tenant Improvements.

(b) **Commencement and Permitting.** Landlord shall commence construction of the Tenant Improvements upon Landlord's obtaining a building permit (the "**TI Permit**") authorizing the construction of the Tenant Improvements consistent with the TI Construction Drawings approved by Tenant as provided herein. The cost of obtaining the TI Permit shall be payable from the TI Fund. Tenant shall assist Landlord in obtaining the TI Permit. If any Governmental Authority having jurisdiction over the construction of Landlord's Work or any portion thereof shall impose terms or conditions upon the construction thereof that: (i) are inconsistent with Landlord's obligations hereunder, (ii) increase the cost of constructing Landlord's



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Work, or (iii) will materially delay the construction of Landlord's Work, Landlord and Tenant shall reasonably and in good faith seek means by which to mitigate or eliminate any such adverse terms and conditions.

(c) **Completion of Landlord's Work.** Landlord shall use commercially reasonable efforts to Substantially Complete Landlord's Work by the Target Expansion Premises Commencement Date. It is hereby acknowledged by Landlord and Tenant that the permit set based on the TI Construction Drawings must be completed on or before February 22, 2019, in order for Landlord's Work to be Substantially Completed by the Target Expansion Premises Commencement Date. Landlord shall substantially complete or cause to be substantially completed Landlord's Work in a good and workmanlike manner, in accordance with the TI Permit subject, in each case, to Minor Variations and normal "punch list" items of a non-material nature that do not interfere with Tenant's use of the Expansion Premises ("**Substantial Completion**" or "**Substantially Complete**"), which punch list items shall be completed by Landlord within sixty (60) days after the date of Substantial Completion. Upon Substantial Completion of Landlord's Work, Landlord shall require the TI Architect and the General Contractor to execute and deliver, for the benefit of Tenant and Landlord, a Certificate of Substantial Completion in the form of the American Institute of Architects ("**AIA**") document G704. For purposes of this Expansion Premises Work Letter, "**Minor Variations**" shall mean any modifications reasonably required: (i) to comply with all applicable Legal Requirements and/or to obtain or to comply with any required permit (including the TI Permit); (ii) to comply with any request by Tenant for modifications to Landlord's Work; (iii) to comport with good design, engineering, and construction practices that are not material; or (iv) to make reasonable adjustments for field deviations or conditions encountered during the construction of Landlord's Work.

(d) **Selection of Materials.** Where more than one type of material or structure is indicated on the TI Construction Drawings approved by Landlord and Tenant, the option will be selected at Landlord's sole and absolute subjective discretion. As to all building materials and equipment that Landlord is obligated to supply under this Expansion Premises Work Letter, Landlord shall select the manufacturer thereof in its sole and absolute subjective discretion.

(e) **Delivery of the Expansion Premises.** When Landlord's Work is Substantially Complete, subject to the remaining terms and provisions of this Section 3(e), Tenant shall accept the Expansion Premises. Tenant's taking possession and acceptance of the Expansion Premises shall not constitute a waiver of: (i) any warranty with respect to workmanship (including installation of equipment) or material (exclusive of equipment provided directly by manufacturers), (ii) any non-compliance of Landlord's Work with applicable Legal Requirements, or (iii) any claim that Landlord's Work was not completed substantially in accordance with the TI Construction Drawings (subject to Minor Variations and such other changes as are permitted hereunder) (collectively, a "**Construction Defect**"). Tenant shall have one year after Substantial Completion within which to notify Landlord of any such Construction Defect discovered by Tenant, and Landlord shall use reasonable efforts to remedy or cause the responsible contractor to remedy any such Construction Defect within 30 days thereafter. Notwithstanding the foregoing, Landlord shall not be in default under the Lease if the applicable contractor, despite Landlord's reasonable efforts, fails to remedy such Construction Defect within such 30-day period, in which case Landlord shall continue to use reasonable efforts to cause such Construction Defect to be remedied.

Tenant shall be entitled to receive the benefit of all construction warranties and manufacturer's equipment warranties relating to equipment installed in the Expansion Premises. If requested by Tenant, Landlord shall attempt to obtain extended warranties from manufacturers and suppliers of such equipment, but the cost of any such extended warranties shall be borne solely out of the TI Fund. Landlord shall promptly undertake and complete, or cause to be completed, all punch list items.

(f) **Expansion Premises Commencement Date Delay.** Except as otherwise provided in the Lease, Delivery of the Expansion Premises shall occur when Landlord's Work has been Substantially



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Completed, except to the extent that completion of Landlord's Work shall have been actually delayed by any one or more of the following causes ("**Tenant Delay**"):

- (i) Tenant's Representative was not available within 3 business days to give or receive any Communication or to take any other action required to be taken by Tenant within the time period required hereunder;
- (ii) Tenant's request for Change Requests (as defined in Section 4(a) below) whether or not any such Change Requests are actually performed;
- (iii) Construction of any Change Requests;
- (iv) Tenant's request for materials, finishes or installations requiring unusually long lead times;
- (v) Tenant's delay in reviewing, revising or approving plans and specifications beyond the periods set forth herein;
- (vi) Tenant's delay in providing information critical to the normal progression of Landlord's Work within the time period required hereunder (or, if no time period is provided for hereunder, 2 business days). Tenant shall provide such information as soon as reasonably possible, but in no event longer than one week after receipt of any request for such information from Landlord;
- (vii) Tenant's delay in making payments to Landlord for Excess TI Costs (as defined in Section 5(e) below);
- (viii) Labor disharmony as a result of non-union labor employed by any contractor or subcontractor engaged by Tenant or any Tenant Party; or
- (ix) Any other act or omission by Tenant or any Tenant Party (as defined in the Lease), or persons employed by any of such persons that continues for more than 2 business days after Landlord's written notice thereof to Tenant.

If Delivery is delayed for any of the foregoing reasons, then Landlord shall cause the TI Architect to certify the date on which the Tenant Improvements would have been completed but for such Tenant Delay and such certified date shall be the date of Delivery.

4 . **Changes.** Any changes requested by Tenant to the Tenant Improvements after the delivery and approval by Landlord of the TI Design Drawings shall be requested and instituted in accordance with the provisions of this Section 4 and shall be subject to the written approval of Landlord and the TI Architect, such approval not to be unreasonably withheld, conditioned or delayed.

(a) **Tenant's Request for Changes.** If Tenant shall request changes to the Tenant Improvements ("**Changes**"), Tenant shall request such Changes by notifying Landlord in writing in substantially the same form as the AIA standard change order form (a "**Change Request**"), which Change Request shall detail the nature and extent of any such Change. Such Change Request must be signed by Tenant's Representative. Landlord shall, before proceeding with any Change, use commercially reasonable efforts to respond to Tenant as soon as is reasonably possible with an estimate of: (i) the time it will take, and (ii) the architectural and engineering fees and costs that will be incurred, to analyze such Change Request (which costs shall be paid from the TI Fund to the extent actually incurred, whether or not

such change is implemented). Landlord shall thereafter submit to Tenant in writing, within 5 business days of receipt of the Change Request (or such longer period of time as is reasonably required depending on the extent of the Change Request), an analysis of the additional cost or savings involved, including, without limitation, architectural and engineering costs and the period of time, if any, that the Change will extend the date on which Landlord's Work will be Substantially Complete. Any such delay in the completion of Landlord's Work caused by a Change, including any suspension of Landlord's Work while any such Change is being evaluated and/or designed, shall be Tenant Delay.

(b) **Implementation of Changes.** If Tenant: (i) approves in writing the cost or savings and the estimated extension in the time for completion of Landlord's Work, if any, and (ii) deposits with Landlord any Excess TI Costs required in connection with such Change, Landlord shall cause the approved Change to be instituted. Notwithstanding any approval or disapproval by Tenant of any estimate of the delay caused by such proposed Change, the TI Architect's good faith determination of the amount of Tenant Delay in connection with such Change shall be final and binding on Landlord and Tenant.

5. **Costs.**

(a) **Budget For Tenant Improvements.** Before the commencement of construction of the Tenant Improvements, Landlord shall obtain a detailed breakdown by trade of the costs incurred or that will be incurred in connection with the design and construction of the Tenant Improvements (the "**Budget**"). The Budget shall be based upon the TI Construction Drawings approved by Tenant. If the Budget is greater than the TI Allowance, the TI Costs shall be funded on a *pari passu* basis as costs are incurred in accordance with Sections 5(e) and 5(f) below.

(b) **TI Allowance.** Landlord shall make available for the payment of the TI Costs a tenant improvement allowance Tenant a "**TI Allowance**" in the maximum amount of \$[***] per rentable square foot of the Expansion Premises.

The TI Allowance shall be disbursed in accordance with this Expansion Premises Work Letter. Tenant shall have no right to the use or benefit (including any reduction to or payment of Base Rent) of any portion of the TI Allowance not required for the construction of (i) the Tenant Improvements described in the TI Construction Drawings approved pursuant to Section 2(d) or (ii) any Changes pursuant to Section 4.

(c) **Additional TI Allowance.** Landlord shall make available for the payment of Excess TI Costs an additional tenant improvement allowance (the "**Additional TI Allowance**") of \$[***], which shall, to the extent used, result in TI Rent pursuant to Section 4(d) of the First Amendment. Within 5 business days of receipt of the Budget from Landlord, Tenant shall notify Landlord in writing how much of the Additional TI Allowance Tenant has elected to receive from Landlord (the "**Additional TI Allowance Election**"); provided, however that if Tenant does not elect the full amount of the Additional TI Allowance in the Additional TI Allowance Election, Tenant may elect to have additional funds, not to exceed any positive amount remaining after subtraction of the amount elected in the Additional TI Allowance Election from the Additional TI Allowance, to be made available to pay for Excess TI Costs (if any, the "**Subsequent Additional TI Allowance Election**"), upon 10 business days' prior written notice to Landlord, which prior written notice of any Subsequent Additional TI Allowance Election shall be given, if at all, within 45 days of the date of Tenant's initial Additional TI Allowance Election. The Subsequent Additional TI Allowance Election and Additional TI Allowance Election (or if no Subsequent Additional TI Allowance Election is made within the time period required, the Additional TI Allowance Election itself) shall be final and binding on Tenant, and may not thereafter be modified without Landlord's consent, which may be granted or withheld in Landlord's sole and absolute subjective discretion.

(d) **Costs Includable in TI Fund.** The TI Fund (as defined in Section 5(e) below) shall be used solely for the payment of design, permits and construction costs in connection with the construction



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of the Tenant Improvements, including, without limitation, the cost of electrical power and other utilities used in connection with the construction of the Tenant Improvements, the cost of preparing the TI Design Drawings and the TI Construction Drawings, all costs set forth in the Budget, including Landlord's out-of-pocket expenses, costs resulting from Tenant Delays and the cost of Changes (collectively, "**TI Costs**"). Notwithstanding anything to the contrary contained herein, the TI Fund shall not be used to purchase any furniture, personal property or other non-building system materials or equipment, including, but not limited to, Tenant's voice or data cabling, non-ducted biological safety cabinets and other scientific equipment not incorporated into the Tenant Improvements.

(e) **Excess TI Costs.** Landlord shall have no obligation to bear any portion of the cost of any of the Tenant Improvements except to the extent of the TI Allowance and the Additional TI Allowance that Tenant has elected to receive. If at any time the remaining TI Costs under the then-current Budget exceed the remaining unexpended TI Allowance and Additional TI Allowance that Tenant has elected to receive (such excess sometimes referred to herein as "**Excess TI Costs**"), each party's obligations for payment shall be as set forth in this Section 5(e) and in Section 5(f). The TI Allowance, the Additional TI Allowance and Excess TI Costs are herein referred to as the "**TI Fund**." As used in this Work Letter, "**Landlord's Portion**" shall equal the TI Allowance and the Additional TI Allowance that Tenant has elected to receive. For purposes of this Work Letter, "**Landlord's Proportionate Share**" shall mean a fraction, the numerator of which shall be the Landlord's Portion and the denominator of which shall be the then-current Budget. If at any time TI Costs under the then-current Budget exceed the TI Allowance and the Additional TI Allowance that Tenant has elected to receive, the difference shall be referred to herein as "**Tenant's Portion**." For purposes of this Work Letter, "**Tenant's Proportionate Share**" shall mean a fraction, the numerator of which is Tenant's Portion and the denominator of which is the then-current Budget. Upon notice to Tenant, Landlord may equitably adjust Landlord's Proportionate Share and Tenant's Proportionate Share from time to time based on changes in the anticipated TI Costs. After the end of each calendar month, beginning with the month in which Landlord obtains the Budget: (i) Landlord shall determine the TI Costs incurred for the prior calendar month (and if applicable, for the period prior to Lease execution) (collectively, the "**Total Monthly Costs**"), (ii) Tenant shall reimburse Landlord within the time period set forth in Section 5(f) below for Tenant's Proportionate Share of Total Monthly Costs, and (iii) Landlord shall pay Landlord's Proportionate Share of Total Monthly Costs from the remaining amount of the TI Allowance and Additional TI Allowance that Tenant has elected to receive.

(f) **Funding Requisition; Reconciliation; Timely Payment.** Landlord shall submit to Tenant monthly during the performance of the Tenant Improvements a report (each, a "**Reimbursement Notice**") setting forth in reasonable detail: (i) a computation of the TI Costs incurred during the prior calendar month, including without limitation costs relating to all requested Changes; (ii) the then-current cumulative TI Costs; and (iii) Landlord's calculation of the parties' respective responsibilities for payment of such costs for such month (i.e., the estimated amounts of Tenant's Portion and/or Landlord's Portion due for such month). Each month, Landlord shall prepare a reconciliation of actual TI Costs with TI Costs in accordance with the Budget for which Tenant has advanced Tenant's Proportionate Share, and: (x) in the event of any overpayment by Tenant, then, solely to the extent of any Tenant's Proportionate Share that Tenant has actually deposited with Landlord, such overpayment shall be credited against the amounts next due hereunder unless construction of the Tenant Improvements is completed, in which case such overpayment shall be promptly refunded to Tenant; and (y) in the event of an underpayment by Tenant, Tenant shall, as a condition precedent to Landlord's obligation to complete the Tenant Improvements, reimburse Landlord therefor within thirty (30) days of receipt of a Reimbursement Notice. Notwithstanding anything to the contrary set forth in this Section, Tenant shall be fully and solely liable for TI Costs and the costs of Changes and Minor Variations in excess of the TI Allowance and Additional TI Allowance that Tenant has elected to receive. Reimbursement Notices may be sent during a calendar month for the prior calendar month and shall be submitted no later than the end of each calendar month for the prior calendar month. Upon final completion of the Tenant Improvements (including all Punch List Items), Landlord shall prepare a final reconciliation consisting of a reconciliation of the total costs of the Tenant Improvements. Tenant shall pay



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to Landlord the amount of Tenant's Proportionate Share of Total Monthly Costs as set forth in each Reimbursement Notice within thirty (30) days of receipt of each Reimbursement Notice (or such lesser period as may be required to enable Landlord to comply with the Massachusetts "Prompt Pay" legislation). Such payment by Tenant shall be a condition precedent to Landlord's obligation to complete the Tenant Improvements. If Tenant fails to pay Tenant's Proportionate Share of Total Monthly Costs as set forth in any Reimbursement Notice within such period, Landlord shall have all of the rights and remedies set forth in the Lease for nonpayment of Rent (including, but not limited to, the right to interest at the Default Rate and the right to assess a late charge, each in accordance with the terms of the Lease). For purposes of any claims made or litigation instituted with regard to Tenant's Portion or Tenant's Proportionate Share of Total Monthly Costs, such amounts shall constitute Rent under the Lease.

6. **Tenant Access.**

(a) **Tenant's Access Rights.** Landlord hereby agrees to permit Tenant access, at Tenant's sole risk and expense, to the Expansion Premises (i) 60 days prior to the Expansion Premises Commencement Date to perform any work ("**Tenant's Work**") required by Tenant (including, without limitation, installing furniture, fixtures, equipment and cabling in the Premises) other than Landlord's Work, provided that such Tenant's Work is coordinated with the TI Architect and the General Contractor, and complies with the Lease and all other reasonable restrictions and conditions Landlord may impose, and (ii) prior to the completion of Landlord's Work, to inspect and observe work in process; all such access shall be during normal business hours or at such other times as are reasonably designated by Landlord. Any entry and access by Tenant shall comply with all established safety practices of the General Contractor and Landlord until completion of Landlord's Work and acceptance thereof by Tenant.

(b) **No Interference.** Neither Tenant nor any Tenant Party (as defined in the Lease) shall interfere with the performance of Landlord's Work, nor with any inspections or issuance of final approvals by applicable Governmental Authorities, and upon any such interference, Landlord shall have the right, in addition to other rights and remedies under the Expansion Premises Work Letter or the Lease, to exclude Tenant and/or any Tenant Party from the Expansion Premises until Substantial Completion of Landlord's Work.

(c) **Labor Harmony.** Tenant agrees that any work performed by or on behalf of Tenant or any Tenant Party shall be performed in such manner and by such persons as shall maintain harmonious labor relations at the Project. If labor disharmony arises as a result of non-union labor employed by a subcontractor or other contractor engaged by Tenant or any Tenant Party, and such labor disharmony causes a delay in the construction of the Non-TI Project Improvements or Landlord's Work, such delay shall be a Tenant Delay under this Work Letter. If labor disharmony arises as a result of a contractor or subcontractor engaged by Tenant or any Tenant Party, or if Landlord reasonably believes that a contractor or subcontractor employed by Tenant or any Tenant Party will cause labor disharmony in the Project, Landlord shall have the right, in addition to other rights and remedies under the Work Letter or Lease, to exclude from the Premises and Project such contractor or subcontractor employed by Tenant or any Tenant Party.

(d) **No Acceptance of Expansion Premises.** The fact that Tenant may, with Landlord's consent, enter into the Expansion Premises prior to the date Landlord's Work is Substantially Complete for the purpose of performing Tenant's Work shall not be deemed an acceptance by Tenant of possession of the Expansion Premises, but in such event Tenant shall defend with counsel reasonably acceptable by Landlord, indemnify and hold Landlord harmless from and against any loss of or damage to Tenant's property, completed work, fixtures, equipment, materials or merchandise, and from liability for death of, or injury to, any person, caused by the act or omission of Tenant or any Tenant Party.



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7. **Miscellaneous.**

(a) **Consents.** Whenever consent or approval of either party is required under this Expansion Premises Work Letter, that party shall not unreasonably withhold, condition or delay such consent or approval, unless expressly set forth herein to the contrary.

(b) **Modification.** No modification, waiver or amendment of this Expansion Premises Work Letter or of any of its conditions or provisions shall be binding upon Landlord or Tenant unless in writing signed by Landlord and Tenant.

(c) **No Default Funding.** In no event shall Landlord have any obligation to fund any portion of the TI Allowance or to perform any Landlord's Work during any period that Tenant is in Default under the Lease.



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CERTAIN INFORMATION IDENTIFIED BY BRACKETED ASTERISKS ([* * *]) HAS BEEN OMITTED FROM THIS EXHIBIT BECAUSE IT IS BOTH NOT MATERIAL AND WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED.

This SECOND AMENDMENT, effective as of July 25, 2018 (the "SECOND AMENDMENT EFFECTIVE DATE"), amends the Exclusive Patent License Agreement dated January 28, 2016, and First Amendment dated December 12, 2017 (the "LICENSE"), between the **Whitehead Institute for Biomedical Research** ("WHITEHEAD") and **Rubius Therapeutics, Inc.** ("COMPANY").

WHEREAS, WHITEHEAD and COMPANY wish to modify Appendix A of the LICENSE;

WHEREAS, WHITEHEAD is owner of certain SECOND AMENDMENT PATENT RIGHTS, as later defined herein, relating to [***], "[***]", by [***];

WHEREAS, WHITEHEAD desires to have the PATENT RIGHTS developed and commercialized to benefit the public, and WHITEHEAD is willing to grant a license thereunder;

WHEREAS, COMPANY desires to add such SECOND AMENDMENT PATENT RIGHTS to the LICENSE.

NOW, THEREFORE, WHITEHEAD and COMPANY hereby agree as follows:

Capitalized terms used herein and not defined herein shall have the respective meanings ascribed to such terms in the LICENSE.

1. The following (hereinafter the "SECOND AMENDMENT PATENT RIGHTS") is included under the definition of PATENT RIGHTS and is added to Appendix A of the LICENSE:

[***].

Appendix A of the LICENSE is deleted in its entirety and replaced with the Appendix A of this SECOND AMENDMENT, attached hereto.

2. For the avoidance of doubt, per Section 6.3 of the LICENSE, payment of all fees and costs, including attorneys' fees relating to the filing, prosecution, and maintenance of the SECOND AMENDMENT PATENT RIGHTS shall be the responsibility of COMPANY, whether such amounts were incurred before or after the SECOND AMENDMENT EFFECTIVE DATE. WHITEHEAD has incurred \$[***] for such patent-related fees and costs as of [***].

3. The following is added to Section 10.1 of the LICENSE:

10.1 WHITEHEAD represents that as of the SECOND AMENDMENT EFFECTIVE DATE, it is the owner of all right, title, and interest in and to [***] of the PATENT RIGHTS, and it has the lawful right to grant the rights as set forth in this Agreement.

4. As consideration for this SECOND AMENDMENT, COMPANY shall pay WHITEHEAD a case addition fee of [***] Dollars (\$[***]) within [***] of the SECOND AMENDMENT EFFECTIVE DATE. This payment is nonrefundable.

5. The LICENSE, as amended hereby, is hereby ratified and confirmed in all respects and shall continue in full force and effect. The LICENSE will, together with this SECOND AMENDMENT, be read and construed as a single instrument. All other terms and conditions of the LICENSE are confirmed and remain in full force and effect. This SECOND AMENDMENT shall be binding upon, and shall inure to the benefit of, the parties hereto and their respective successors and assigns.

Signatures follow on the next page.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their duly authorized representatives.

For WHITEHEAD

For COMPANY:

By: /s/ Carla DeMaria

By: /s/ Torben Straight Nissen

Name: Carla DeMaria

Name: Torben Straight Nissen

Title: Director of Intellectual Property & Sponsored Programs

Title: President

Date: July 31, 2018

Date: July 25, 2018

APPENDIX A

List of Patent Applications and Patents

[***].

CERTIFICATION PURSUANT TO RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934, AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

CERTIFICATIONS

I, Pablo J. Cagnoni, M.D., certify that:

1. I have reviewed this Amendment No. 1 to Annual Report on Form 10-K of Rubius 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: May 15, 2019

By: /s/ Pablo J. Cagnoni
Pablo J. Cagnoni, M.D.
Chief Executive Officer
(Principal Executive Officer)

CERTIFICATION PURSUANT TO RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934, AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

CERTIFICATIONS

I, Andrew M. Oh, certify that:

1. I have reviewed this Amendment No. 1 to Annual Report on Form 10-K of Rubius 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: May 15, 2019

By: /s/ Andrew M. Oh

Andrew M. Oh
Chief Financial Officer
(Principal Financial Officer)
