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

# FORM 10-Q

**(Mark One)**

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

**For the quarterly period ended March 31, 2019**

**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: 001-37524**

# vTv Therapeutics Inc.

**(Exact name of registrant as specified in its charter)**

| **Delaware** | **47-3916571** |
|---|---|
| **(State or other jurisdiction of incorporation or organization)** | **(I.R.S. Employer Identification No.)** |
| **4170 Mendenhall Oaks Pkwy High Point, NC** | **27265** |
| **(Address of principal executive offices)** | **(Zip Code)** |

**(336) 841-0300**
**(Registrant's telephone number, including area code)**

**(Former name, former address and former fiscal year, if changed since last report)**

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

| | | | |
|---|---|---|---|
| Large accelerated filer | ☐ | Accelerated filer | ☐ |
| Non-accelerated filer | ☐ | Smaller reporting company | ☒ |
| Emerging growth company | ☒ | | |

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

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

| **Class of Stock** | **Shares Outstanding as of May 1, 2019** |
|---|---|
| Class A common stock, par value $0.01 per share | 27,255,963 |
| Class B common stock, par value $0.01 per share | 23,094,221 |

**vTv THERAPEUTICS INC. AND SUBSIDIARIES**
**INDEX TO FORM 10-Q**
**FOR THE QUARTER ENDED MARCH 31, 2019**

**PART I – FINANCIAL INFORMATION**

The financial statements and other disclosures contained in this report include those of vTv Therapeutics Inc. ("we", the "Company" or the "Registrant"), which is the registrant, and those of vTv Therapeutics LLC ("vTv LLC"), which is the principal operating subsidiary of the Registrant. Unless the context suggests otherwise, references in this Quarterly Report on Form 10-Q to the "Company", "we", "us" and "our" refer to vTv Therapeutics Inc. and its consolidated subsidiaries.

**vTv Therapeutics Inc.**
**Condensed Consolidated Balance Sheets**
**(in thousands, except number of shares and per share data)**

| | March 31, 2019 (Unaudited) | December 31, 2018 |
|---|---|---|
| **Assets** | | |
| Current assets: | | |
| Cash and cash equivalents | $ 4,959 | $ 1,683 |
| Prepaid expenses and other current assets | 419 | 666 |
| Current deposits | 34 | 1,124 |
| Total current assets | 5,412 | 3,473 |
| Restricted cash and cash equivalents, long-term | 2,500 | 2,500 |
| Property and equipment, net | 62 | 70 |
| Operating lease right-of-use assets | 246 | — |
| Long-term investments | 2,480 | 2,480 |
| Long-term deposits | 36 | 36 |
| Total assets | $ 10,736 | $ 8,559 |
| **Liabilities, Redeemable Noncontrolling Interest and Stockholders' Deficit** | | |
| Current liabilities: | | |
| Accounts payable and accrued expenses | $ 6,244 | $ 7,702 |
| Operating lease liabilities | 259 | — |
| Current portion of deferred revenue | 839 | 1,752 |
| Current portion of notes payable | 9,167 | 9,383 |
| Total current liabilities | 16,509 | 18,837 |
| Notes payable, net of current portion | 4,014 | 6,330 |
| Deferred revenue, net of current portion | 1,067 | 1,067 |
| Warrant liability, related party | 1,515 | 2,436 |
| Other liabilities | 260 | 260 |
| Total liabilities | 23,365 | 28,930 |
| Commitments and contingencies | | |
| Redeemable noncontrolling interest | 45,106 | 62,482 |
| Stockholders' deficit: | | |
| Class A Common Stock, $0.01 par value; 100,000,000 shares authorized, 27,255,963 and 20,347,065 shares outstanding as of March 31, 2019 and December 31, 2018, respectively | 273 | 203 |
| Class B Common Stock, $0.01 par value; 100,000,000 shares authorized, and 23,094,221 outstanding as of March 31, 2019 and December 31, 2018 | 232 | 232 |
| Additional paid-in capital | 162,249 | 150,595 |
| Accumulated deficit | (220,489) | (233,883) |
| Total stockholders' deficit attributable to vTv Therapeutics Inc. | (57,735) | (82,853) |
| Total liabilities, redeemable noncontrolling interest and stockholders' deficit | $ 10,736 | $ 8,559 |

*The accompanying notes are an integral part of the unaudited condensed consolidated financial statements.*

**vTv Therapeutics Inc.**
**Condensed Consolidated Statements of Operations - Unaudited**
**(in thousands, except number of shares and per share data)**

| | Three Months Ended March 31, | |
|---|---|---|
| | **2019** | **2018** |
| Revenue | $ 921 | $ 2,064 |
| Operating expenses: | | |
| Research and development | 2,822 | 8,943 |
| General and administrative | 2,386 | 2,255 |
| Total operating expenses | 5,208 | 11,198 |
| Operating loss | (4,287) | (9,134) |
| Other income | — | 36 |
| Other income – related party | 921 | (25) |
| Interest income | 10 | 18 |
| Interest expense | (626) | (855) |
| Loss before income taxes and noncontrolling interest | (3,982) | (9,960) |
| Income tax provision | — | — |
| Net loss before noncontrolling interest | (3,982) | (9,960) |
| Less: net loss attributable to noncontrolling interest | (1,827) | (7,008) |
| Net loss attributable to vTv Therapeutics Inc. | $ (2,155) | $ (2,952) |
| Net loss attributable to vTv Therapeutics Inc. common shareholders | $ (5,883) | $ (2,952) |
| Net loss per share of vTv Therapeutics Inc. Class A Common Stock, basic and diluted | $ (0.26) | $ (0.30) |
| Weighted-average number of vTv Therapeutics Inc. Class A Common Stock, basic and diluted | 22,862,907 | 9,699,721 |

*The accompanying notes are an integral part of the unaudited condensed consolidated financial statements.*

**vTv Therapeutics Inc.**
**Condensed Consolidated Statement of Changes in Redeemable Noncontrolling Interest and Stockholders' Deficit - Unaudited**
**(in thousands, except number of shares)**

**For the three months ended March 31, 2019**

| | Redeemable Noncontrolling Interest | Class A Common Stock | | Class B Common Stock | | Additional Paid-in Capital | Accumulated Deficit | Total Stockholders' Deficit |
|---|---|---|---|---|---|---|---|---|
| | | Shares | Amount | Shares | Amount | | | |
| **Balances at December 31, 2018** | **$ 62,482** | **20,347,065** | **$ 203** | **23,094,221** | **$ 232** | **$ 150,595** | **$ (233,883)** | **$ (82,853)** |
| Net loss | (1,827) | — | — | — | — | — | (2,155) | (2,155) |
| Share-based compensation | — | — | — | — | — | 281 | — | 281 |
| Issuance of Class A Common Stock under registered direct offering | — | 3,636,364 | 37 | — | — | 5,406 | — | 5,443 |
| Issuance of Class A Common Stock to a related party under the Letter Agreements | — | 3,260,868 | 33 | — | — | 5,967 | — | 6,000 |
| Vesting of restricted stock units | — | 11,666 | — | — | — | — | — | — |
| Change in redemption value of noncontrolling interest | (15,549) | — | — | — | — | — | 15,549 | 15,549 |
| **Balances at March 31, 2019** | **$ 45,106** | **27,255,963** | **$ 273** | **23,094,221** | **$ 232** | **$ 162,249** | **$ (220,489)** | **$ (57,735)** |

**For the three months ended March 31, 2018**

| | Redeemable Noncontrolling Interest | Class A Common Stock | | Class B Common Stock | | Additional Paid-in Capital | Accumulated Deficit | Total Stockholders' Deficit |
|---|---|---|---|---|---|---|---|---|
| | | Shares | Amount | Shares | Amount | | | |
| **Balances at December 31, 2017** | **$ 131,440** | **9,693,254** | **$ 97** | **23,119,246** | **$ 232** | **$ 127,682** | **$ (279,058)** | **$ (151,047)** |
| Net loss | (7,008) | — | — | — | — | — | (2,952) | (2,952) |
| Cumulative effect of accounting change | — | — | — | — | — | — | 213 | 213 |
| Share-based compensation | — | — | — | — | — | 963 | — | 963 |
| Exchange of Class B Common Stock for Class A Common Stock | (151) | 25,025 | — | (25,025) | — | 151 | — | 151 |
| Vesting of restricted stock units | — | 11,667 | — | — | — | — | — | — |
| Change in redemption value of noncontrolling interest | (3,884) | — | — | — | — | — | 3,884 | 3,884 |
| **Balances at March 31, 2018** | **$ 120,397** | **9,729,946** | **$ 97** | **23,094,221** | **$ 232** | **$ 128,796** | **$ (277,913)** | **$ (148,788)** |

*The accompanying notes are an integral part of the unaudited condensed consolidated financial statements.*

**vTv Therapeutics Inc.**
**Condensed Consolidated Statements of Cash Flows - Unaudited**
**(in thousands)**

| | Three Months Ended March 31, | |
|---|---|---|
| | **2019** | **2018** |
| **Cash flows from operating activities:** | | |
| Net loss before noncontrolling interest | $ (3,982) | $ (9,960) |
| Adjustments to reconcile net loss before noncontrolling interest to net cash used in operating activities: | | |
| Loss (gain) on disposal of property and equipment, net | — | (12) |
| Depreciation expense | 8 | 42 |
| Share-based compensation expense | 281 | 963 |
| Change in fair value of warrants, related party | (921) | 25 |
| Amortization of debt discount | 185 | 275 |
| Changes in assets and liabilities: | | |
| Accounts receivable | — | 7,790 |
| Prepaid expenses and other assets | 1,337 | (2,072) |
| Long-term deposits | — | 2,256 |
| Accounts payable and accrued expenses | (1,445) | (2,605) |
| Deferred revenue | (913) | (2,064) |
| Other liabilities | — | (35) |
| Net cash used in operating activities | (5,450) | (5,397) |
| **Cash flows from investing activities:** | | |
| Proceeds from sale of assets | — | 12 |
| Net cash provided by investing activities | — | 12 |
| **Cash flows from financing activities:** | | |
| Proceeds from issuance of Class A Common Stock to a related party under the Letter Agreements | 6,000 | — |
| Proceeds from issuance of Class A Common Stock, net of offering costs | 5,443 | — |
| Repayment of notes payable | (2,717) | — |
| Net cash provided by financing activities | 8,726 | — |
| Net increase (decrease) in cash, cash equivalents and restricted cash and cash equivalents | 3,276 | (5,385) |
| Total cash, cash equivalents and restricted cash and cash equivalents, beginning of period | 4,183 | 14,420 |
| Total cash, cash equivalents and restricted cash and cash equivalents, end of period | $ 7,459 | $ 9,035 |
| | | |
| Non-cash activities: | | |
| Change in redemption value of noncontrolling interest | $ (15,549) | $ (3,884) |
| Exchange of vTv Therapeutics Inc. Class B Common Stock and vTv Therapeutics, LLC member units for vTv Therapeutics Inc. Class A Common Stock | $ — | $ 151 |

*The accompanying notes are an integral part of the unaudited condensed consolidated financial statements.*

## Note 1: Description of Business, Basis of Presentation and Going Concern

### *Description of Business*

vTv Therapeutics Inc. (the "Company," the "Registrant," "we" or "us") was incorporated in the state of Delaware in April 2015. The Company was formed to discover and develop orally administered small molecule drug candidates to fill significant unmet medical needs.

### *Principles of Consolidation*

vTv Therapeutics Inc. is a holding company and its principal asset is a controlling equity interest in vTv Therapeutics LLC ("vTv LLC"), the Company's principal operating subsidiary, which is a clinical-stage biopharmaceutical company engaged in the discovery and development of orally administered small molecule drug candidates to fill significant unmet medical needs.

The Company has determined that vTv LLC is a variable-interest entity ("VIE") for accounting purposes and that vTv Therapeutics Inc. is the primary beneficiary of vTv LLC because (through its managing member interest in vTv LLC and the fact that the senior management of vTv Therapeutics Inc. is also the senior management of vTv LLC) it has the power and benefits to direct all of the activities of vTv LLC, which include those that most significantly impact vTv LLC's economic performance. vTv Therapeutics Inc. has therefore consolidated vTv LLC's results pursuant to Accounting Standards Codification Topic 810, "Consolidation" in its Condensed Consolidated Financial Statements. As of March 31, 2019, various holders own non-voting interests in vTv LLC, representing a 45.9% economic interest in vTv LLC, effectively restricting vTv Therapeutics Inc.'s interest to 54.1% of vTv LLC's economic results, subject to increase in the future, should vTv Therapeutics Inc. purchase additional non-voting common units ("vTv Units") of vTv LLC, or should the holders of vTv Units decide to exchange such units (together with shares of Class B Common Stock) for shares of Class A Common Stock (or cash) pursuant to the Exchange Agreement (as defined in Note 9). vTv Therapeutics Inc. has provided financial and other support to vTv LLC in the form of its purchase of vTv Units with the net proceeds of the Company's initial public offering ("IPO") in 2015 and its registered direct offering in March 2019, its agreeing to be a co-borrower under the Venture Loan and Security Agreement (the "Loan Agreement") with Horizon Technology Finance Corporation and Silicon Valley Bank (together, the "Lenders") which was entered into in 2016 and its entrance into the letter agreements, dated as of December 5, 2017, July 30, 2018, December 11, 2018 and March 18, 2019 with MacAndrews and Forbes Group LLC (the "Letter Agreements"). vTv Therapeutics Inc. will not be required to provide financial or other support for vTv LLC outside of its obligations pertaining to the Loan Agreement as a co-borrower. However, vTv Therapeutics Inc. will control its business and other activities through its managing member interest in vTv LLC, and its management is the management of vTv LLC. The creditors of vTv LLC do not have any recourse to the general credit of vTv Therapeutics Inc. except as allowed under the provisions of the Loan Agreement. Nevertheless, because vTv Therapeutics Inc. will have no material assets other than its interests in vTv LLC, any financial difficulties at vTv LLC could result in vTv Therapeutics Inc. recognizing a loss.

### *Going Concern and Liquidity*

To date, the Company has not generated any product revenue and has not achieved profitable operations. The continuing development of our drug candidates will require additional financing. From its inception through March 31, 2019, the Company has funded its operations primarily through a combination of private placements of common and preferred equity, research collaboration agreements, upfront and milestone payments for license agreements, debt and equity financings and the completion of its IPO in August 2015. As of March 31, 2019, the Company had an accumulated deficit of $220.5 million and has generated net losses in each year of its existence.

In March 2019, the Company completed a registered direct offering through which it sold 3,636,364 shares of its Class A Common Stock and raised net proceeds of approximately $5.4 million, net of related transaction costs. Further, the Company entered into an additional Letter Agreement with MacAndrews and Forbes Group LLC (the "March 2019 Letter Agreement") under which it may sell, at the Company's option, up to 5,454,546 shares of its Class A Common Stock at a fixed price of $1.65 per share for aggregate proceeds of up to $9.0 million during a one-year period after the date of the March 2019 Letter Agreement (the "Investment Period"). The March 2019 Letter Agreement also permits MacAndrews and Forbes Group LLC to exercise an option to purchase Class A Common Stock at the same price up to three times during the Investment Period.

As of March 31, 2019, the Company's liquidity sources included cash and cash equivalents of $5.0 million and $11.5 million of remaining funds available under the Letter Agreements. Based on the Company's current operating plan, management believes that its current cash and cash equivalents and the remaining funds available under the Letter Agreements will allow the Company to meet its liquidity requirements into the third quarter of 2019, which is less than twelve months from the issuance of these Condensed Consolidated Financial Statements. These conditions raise substantial doubt about the Company's ability to continue as a going concern.

The Company is performing start-up activities and expects to begin screening patients in June 2019 for a Phase 2 trial to evaluate *azeliragon* as a potential treatment of mild-AD in patients with type 2 diabetes. Further, the Company continues to conduct the Phase 2 clinical trial of *TTP399* in patients with type 1 diabetes. In order to complete these trials and continue its operations, the Company will require additional financing. The Company is evaluating several financing strategies to provide continued funding which may include additional direct equity investments or future public offerings of our common stock. The timing and availability of such financing is not yet known.

The Company's financial statements have been prepared assuming the Company will continue as a going concern, which contemplates, among other things, the realization of assets and satisfaction of liabilities in the normal course of business. The Condensed Consolidated Financial Statements do not include adjustments to reflect the possible future effects on the recoverability and classification of recorded assets or the amounts of liabilities that might be necessary should the Company be unable to continue as a going concern.

**Note 2: Summary of Significant Accounting Policies**

***Unaudited Interim Financial Information***

The accompanying financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP"). The accompanying Condensed Consolidated Balance Sheet as of March 31, 2019, Condensed Consolidated Statements of Operations for the three months ended March 31, 2019 and 2018, Condensed Consolidated Statement of Changes in Redeemable Noncontrolling Interest and Stockholders' Deficit for the three months ended March 31, 2019 and 2018 and Condensed Consolidated Statements of Cash Flows for the three months ended March 31, 2019 and 2018 are unaudited. These unaudited financial statements have been prepared in accordance with the rules and regulations of the United States Securities and Exchange Commission ("SEC") for interim financial information. Accordingly, they do not include all of the information and footnotes required by GAAP for complete financial statements. These financial statements should be read in conjunction with the audited financial statements and the accompanying notes for the year ended December 31, 2018 contained in the Company's Annual Report on Form 10-K. The unaudited interim financial statements have been prepared on the same basis as the annual financial statements and, in the opinion of management, reflect all adjustments (consisting of normal recurring adjustments) necessary to state fairly the Company's financial position as of March 31, 2019, the results of operations for the three months ended March 31, 2019 and 2018 and cash flows for the three months ended March 31, 2019 and 2018. The December 31, 2018 Condensed Consolidated Balance Sheet included herein was derived from the audited financial statements but does not include all disclosures or notes required by GAAP for complete financial statements.

The financial data and other information disclosed in these notes to the financial statements related to the three months ended March 31, 2019 and 2018 are unaudited. Interim results are not necessarily indicative of results for an entire year.

The Company does not have any components of other comprehensive income recorded within its Condensed Consolidated Financial Statements, and, therefore, does not separately present a statement of comprehensive income in its Condensed Consolidated Financial Statements.

***Use of Estimates***

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires the Company to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities as of the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

On an ongoing basis, the Company evaluates its estimates, including those related to the grant date fair value of equity awards, the fair value of warrants to purchase shares of its Class A Common Stock, the fair value of the Class B Common Stock, the useful lives of property and equipment, the fair value of derivative liabilities, and the fair value of the Company's debt, among others. The Company bases its estimates on historical experience and on various other assumptions that it believes to be reasonable, the results of which form the basis for making judgments about the carrying value of assets and liabilities.

***Concentration of Credit Risk***

Financial instruments that potentially expose the Company to concentrations of credit risk consist principally of cash on deposit with multiple financial institutions. The balances of these cash accounts frequently exceed insured limits.

Two customers represented 100% of the revenue earned during the three months ended March 31, 2019. Two customers represented 100% of the revenue earned during the three months ended March 31, 2018.

***Cash and Cash Equivalents***

The Company considers any highly liquid investments with an original maturity of three months or less to be cash and cash equivalents.

***Restricted Cash and Cash Equivalents***

Restricted cash and cash equivalents, long-term as of March 31, 2019 and December 31, 2018 was $2.5 million at each date. These amounts relate to the minimum balance that the Company must maintain in a deposit account that is pledged to secure the Loan Agreement and is subject to an account control agreement pursuant to the Loan Agreement.

The following table provides a reconciliation of cash, cash equivalents and restricted cash reported within the Condensed Consolidated Balance Sheets as of March 31, 2019 and December 31, 2018 that sum to the total of the same such amounts shown in the Condensed Consolidated Statements of Cash Flows (in thousands):

| | March 31, 2019 | December 31, 2018 |
|---|---|---|
| Cash and cash equivalents | $ 4,959 | $ 1,683 |
| Restricted cash and cash equivalents, long-term | 2,500 | 2,500 |
| Total cash, cash equivalents and restricted cash and cash equivalents shown in the consolidated statement of cash flows | $ 7,459 | $ 4,183 |

***Investments***

In connection with the License Agreement with Reneo Pharmaceuticals, Inc. (“Reneo”) (the “Reneo License Agreement”), the Company received common stock and certain participation rights representing a minority equity interest in Reneo that is classified as a long-term investment in the Company’s Condensed Consolidated Balance Sheets as of March 31, 2019 and December 31, 2018. The Company owns less than 20% of the voting equity of Reneo and does not have the ability to exercise significant influence over Reneo. Since it does not have a readily determinable market value, the Company has elected to measure its investment in Reneo at cost minus impairment, if any, plus or minus changes resulting from observable price changes in orderly transactions for the identical or similar investment.

No adjustments were made to the value of the Company’s investment in Reneo for the three months ended March 31, 2019 and 2018 either due to impairment or based on observable price changes.

***Leases***

The Company determines if an arrangement is a lease at inception. Operating leases are included in operating lease right-of-use assets and operating lease liabilities in the Condensed Consolidated Balance Sheets. Operating lease right-of-use assets and operating lease liabilities are recognized based on the present value of the future minimum lease payments over the lease term at commencement date. As most of the Company’s leases do not provide an implicit rate, the Company uses its incremental borrowing rate based on the information available at the commencement date in determining the present value of future payments. The operating lease right-of-use asset also includes any lease payments made and excludes lease incentives and initial direct costs incurred. Lease expense for minimum lease payments is recognized on a straight-line basis over the lease term.

***Revenue Recognition***

The Company uses the revenue recognition guidance established by ASC Topic 606, “Revenue From Contracts With Customers” (“ASC Topic 606”).

The majority of the Company’s revenue results from its license and collaboration agreements associated with the development of investigational drug products. The Company accounts for a contract when it has approval and commitment from both parties, the rights of the parties are identified, payment terms are identified, the contract has commercial substance and collectability of consideration is probable. For each contract meeting these criteria, the Company identifies the performance obligations included

within the contract. A performance obligation is a promise in a contract to transfer a distinct good or service to the customer. The Company then recognizes revenue under each contract as the related performance obligations are satisfied.

The transaction price under the contract is determined based on the value of the consideration expected to be received in exchange for the transferred assets or services. Development, regulatory and sales milestones included in the Company's collaboration agreements are considered to be variable consideration. The amount of variable consideration expected to be received is included in the transaction price when it becomes probable that the milestone will be met. For contracts with multiple performance obligations, the contract's transaction price is allocated to each performance obligation using the Company's best estimate of the standalone selling price of each distinct good or service in the contract. The primary method used to estimate standalone selling price is the expected cost plus margin approach. Revenue is recognized over the related period over which the Company expects the services to be provided using a proportional performance model or a straight-line method of recognition if there is no discernable pattern over which the services will be provided.

***Research and Development***

Major components of research and development costs include cash and share-based compensation, costs of preclinical studies, clinical trials and related clinical manufacturing, costs of drug development, costs of materials and supplies, facilities costs, overhead costs, regulatory and compliance costs, and fees paid to consultants and other entities that conduct certain research and development activities on the Company's behalf. Research and development costs are expensed as incurred.

The Company records accruals based on estimates of the services received, efforts expended and amounts owed pursuant to contracts with numerous contract research organizations. In the normal course of business, the Company contracts with third parties to perform various clinical study activities in the ongoing development of potential products. The financial terms of these agreements are subject to negotiation and variation from contract to contract and may result in uneven payment flows. Payments under the contracts depend on factors such as the achievement of certain events and the completion of portions of the clinical study or similar conditions. The objective of the Company's accrual policy is to match the recording of expenses in its financial statements to the actual services received and efforts expended. As such, expense accruals related to clinical studies are recognized based on the Company's estimate of the degree of completion of the event or events specified in the specific clinical study.

The Company records nonrefundable advance payments it makes for future research and development activities as prepaid expenses. Prepaid expenses are recognized as expense in the Condensed Consolidated Statements of Operations as the Company receives the related goods or services.

Research and development costs that are reimbursed under a cost-sharing arrangement are reflected as a reduction of research and development expense.

***Recently Issued Accounting Pronouncements***

*Recently Adopted Accounting Pronouncements*

In February 2016, the FASB issued ASU No. 2016-02, "Lease (Topic 842)" ("ASU 2016-02"), which increases transparency and comparability among companies accounting for lease transactions. The Company adopted this guidance effective January 1, 2019 using a modified retrospective application and recorded a cumulative-effect adjustment at the beginning of the period of adoption. The adoption resulted in the recognition of $0.3 million of additional assets and liabilities related to the Company's operating leases within its Condensed Consolidated Balance Sheets. See Note 7 for further details.

**Note 3: Collaboration Agreements**

***Reneo License Agreement***

The Company is party to a License Agreement with Reneo Pharmaceuticals, Inc. ("Reneo") (the "Reneo License Agreement"), under which Reneo obtained an exclusive, worldwide, sublicensable license to develop and commercialize the Company's peroxisome proliferation activated receptor delta (PPAR-δ) agonist program, including the compound *HPP593*, for therapeutic, prophylactic or diagnostic application in humans.

The Company has fully allocated the transaction price to the license and the technology transfer services, which represents a single combined performance obligation because they were not capable of being distinct on their own. The revenue related to this performance obligation is being recognized on a straight-line basis over the technology transfer service period. The unrecognized amount of the transaction price allocated to this performance obligation as of March 31, 2019 was $0.8 million.

The remainder of this performance obligation will be recognized over approximately 2.5 months. For each of the three months ended March 31, 2019 and 2018, the Company has recognized $0.9 million of revenue related to this performance obligation. There

have been no adjustments to the transaction price for this performance obligation during the three months ended March 31, 2019 and 2018.

***Huadong License Agreement***

The Company is party to a License Agreement with Huadong (the "Huadong License Agreement"), under which Huadong obtained an exclusive and sublicensable license to develop and commercialize the Company's glucagon-like peptide-1 receptor agonist ("GLP-1r") program, including the compound *TTP273*, for therapeutic uses in humans or animals, in China and certain other Pacific Rim countries, including Australia and South Korea (collectively, the "Huadong License Territory"). Additionally, under the Huadong License Agreement, the Company obtained a non-exclusive, sublicensable, royalty-free license to develop and commercialize certain Huadong patent rights and know-how related to the Company's GLP-1r program for therapeutic uses in humans or animals outside of the Huadong License Territory.

Under the Huadong License Agreement, the Company is also responsible for conducting a Phase 2 multi-region clinical trial (the "Phase 2 MRCT") including sites in both the United States and Huadong License Territory for the purpose of assessing the safety and efficacy of *TTP273* in patients with type 2 diabetes. The Phase 2 MRCT will be designed to satisfy the requirements of the China Food and Drug Administration necessary in order for Huadong to begin a Phase 3 clinical trial in China. The Company will also be responsible for contributing up to $3.0 million in connection with the Phase 2 MRCT.

The significant performance obligations under this license agreement were determined to be (i) the exclusive license to develop and commercialize the Company's GLP-1r program, (ii) technology transfer services related to the chemistry and manufacturing know-how for a defined period after the effective date (iii) the obligation to sponsor and conduct the Phase 2 MRCT, (iv) the Company's obligation to participate on a joint development committee, and (v) other obligations considered to be de minimis in nature.

The Company has determined that the license and technology transfer services related to the chemistry and manufacturing know-how represent a combined performance obligation because they were not capable of being distinct on their own. The Company also determined that there was no discernable pattern in which the technology transfer services would be provided during the transfer service period. As such, the Company recognized the revenue related to this combined performance obligation using the straight-line method over the transfer service period. The revenue related to this combined performance obligation has been fully recognized as of March 31, 2019. No revenue related to this combined performance obligation was recognized during the three months ended March 31, 2019. For the three months ended March 31, 2018, $1.1 million of revenue was recognized related to this combined performance obligation.

The portion of the transaction price allocated to the obligation to sponsor and conduct a portion of the Phase 2 MRCT was $1.0 million and remained deferred as of March 31, 2019. Revenue for this performance obligation will be recognized using the proportional performance model over the period during which the Company conducts the Phase 2 MRCT trial. No revenue for this performance obligation has yet been recognized.

The portion of the transaction price allocated to the obligation to participate in the joint development committee (the "JDC") to oversee the development of products and the Phase 2 MRCT in accordance with the development plan remained deferred as of March 31, 2019 and revenue will be recognized using the proportional performance model over the period of the Company's participation on the JDC. The unrecognized amount of the transaction price allocated to this performance obligation as of March 31, 2019 was $0.1 million. An immaterial amount of revenue for this performance obligation has been recognized during the three months ended March 31, 2019.

There have been no adjustments to the transaction price for the performance obligations under the Huadong License Agreement during the three months ended March 31, 2019 and 2018.

***Newsoara License Agreement***

The Company is party to a license agreement with Newsoara Biopharma Co., Ltd., ("Newsoara") (the "Newsoara License Agreement"), under which Newsoara obtained an exclusive and sublicensable license to develop and commercialize the Company's phosphodiesterase type 4 inhibitors ("PDE4") program, including the compound *HPP737*, in China, Hong Kong, Macau, Taiwan and other pacific rim countries (collectively, the "Newsoara License Territory"). Additionally, under the Newsoara License Agreement, the Company obtained a non-exclusive, sublicensable, royalty-free license to develop and commercialize certain Newsoara patent rights and know-how related to the Company's PDE4 program for therapeutic uses in humans outside of the Newsoara License Territory.

The Company has fully allocated the transaction price to the license and the technology transfer services which represents a single performance obligation because they were not capable of being distinct on their own. The Company recognized revenue for this performance obligation using the straight-line method over the transfer service period. The revenue for this performance obligation has been fully recognized as of March 31, 2019. No revenue related to this performance obligation was recognized for the

three months ended March 31, 2019 or the three months ended March 31, 2018. There have been no adjustments to the transaction price for the performance obligations under the Newsoara License Agreement during the three months ended March 31, 2019 and 2018

***JDRF Agreement***

In August 2017, the Company entered into the JDRF Agreement to support the funding of the Simplici-T1 Study, a Phase 2 study to explore the effects of *TTP399* in type 1 diabetics. The Company initiated the Phase 2 portion of this study in the second quarter of 2018. According to the terms of the JDRF Agreement, JDRF will provide research funding of up to $3.0 million based on the achievement of research and development milestones, with the total funding provided by JDRF not to exceed approximately one-half of the total cost of the project. Additionally, the Company has the obligation to make certain milestone payments to JDRF upon the commercialization, licensing, sale or transfer of *TTP399* as a treatment for type 1 diabetes.

Payments that the Company receives from JDRF under this agreement will be recorded as restricted cash and current liabilities and recognized as an offset to research and development expense, based on the progress of the project, and only to the extent that the restricted cash is utilized to fund such development activities. As of March 31, 2019, the Company had received funding under this agreement of $0.8 million. Research and development costs were offset by a total of $0.8 million over the course of this agreement.

***Contract Liabilities***

Contract liabilities related to the Company's collaboration agreements consisted of the following (in thousands):

| | March 31, 2019 | December 31, 2018 |
|---|---|---|
| Current portion of deferred revenue | $ 839 | $ 1,752 |
| Deferred revenue, net of current portion | 1,067 | 1,067 |
| Total contract liabilities | $ 1,906 | $ 2,819 |

The change in the Company's contract liabilities for the three months ended March 31, 2019 of $0.9 million was due to the recognition of amounts included in the contract liability at the beginning of the period. There were no changes in the estimated transaction prices for the related contracts during the three months ended March 31, 2019.

**Note 4: Share-Based Compensation**

During the three months ended March 31, 2019, the Company issued non-qualified stock option awards to certain employees of the Company. These option awards vest ratably over a three-year period and the option awards expire after a term of ten years from the date of grant. As of March 31, 2019, the Company had total unrecognized stock-based compensation expense for its outstanding stock option awards of approximately $2.7 million, which is expected to be recognized over a weighted average period of 2.3 years. The weighted average grant date fair value of option grants during the three months ended March 31, 2019 and 2018 was $1.97 and $4.43 per option, respectively. The aggregate intrinsic value of the in-the-money awards outstanding at March 31, 2019 was $0.

The Company uses the Black-Scholes option pricing model to calculate the fair value of stock options granted. The fair value of stock options granted was estimated using the following assumptions:

| | For the Three Months Ended March 31, | |
|---|---|---|
| | 2019 | 2018 |
| Expected volatility | 115.29% - 115.88% | 71.15% |
| Expected life of option, in years | 6.0 | 6.0 |
| Risk-free interest rate | 2.47% - 2.64% | 2.69 |
| Expected dividend yield | 0.00% | 0.00% |

The following table summarizes the activity related to the stock option awards for the three months ended March 31, 2019:

| | Number of Shares | Weighted-Average Exercise Price |
|---|---|---|
| Awards outstanding at December 31, 2018 | 1,767,503 | $ 8.57 |
| Granted | 948,500 | 2.30 |
| Forfeited | (50,143) | 5.61 |
| Awards outstanding at March 31, 2019 | 2,665,860 | $ 6.40 |
| Options exercisable at March 31, 2019 | 1,415,223 | $ 9.40 |
| Weighted average remaining contractual term | 7.0 Years | |
| Options vested and expected to vest at March 31, 2019 | 2,603,440 | $ 6.47 |
| Weighted average remaining contractual term | 8.1 Years | |

The following table summarizes the activity related to the RSU awards for the three months ended March 31, 2019:

| | Number of Shares | Weighted-Average Grant Date Fair Value |
|---|---|---|
| Awards outstanding at December 31, 2018 | 23,333 | $ 5.81 |
| Vested | (11,666) | 5.81 |
| Awards outstanding at March 31, 2019 | 11,667 | $ 5.81 |
| RSUs expected to vest at March 31, 2019 | 11,447 | $ 5.81 |

As of March 31, 2019, the Company had total unrecognized stock-based compensation expense for its outstanding RSU awards of approximately $0.1 million, which is expected to be recognized over a weighted-average period of 0.9 years. The aggregate intrinsic value of the RSUs outstanding at March 31, 2019 was de minimis.

Compensation expense related to the grants of stock options and RSUs is included in research and development and general and administrative expense as follows (in thousands):

| | Three Months Ended March 31, | |
|---|---|---|
| | 2019 | 2018 |
| Research and development | $ 65 | $ 399 |
| General and administrative | 216 | 564 |
| Total share-based compensation expense | $ 281 | $ 963 |

**Note 5: Notes Payable**

Notes payable consist of the following (in thousands):

| | March 31, 2019 | December 31, 2018 |
|---|---|---|
| Notes payable under the Loan Agreement | $ 12,397 | $ 14,897 |
| Short-term financing | — | 216 |
| Accreted final payment | 784 | 600 |
| Total notes payable | 13,181 | 15,713 |
| Less: Current portion | (9,167) | (9,383) |
| Total notes payable, net of current portion | $ 4,014 | $ 6,330 |

In October 2016, the Company entered into the Loan Agreement with Horizon Technology Finance Corporation and Silicon Valley Bank, under which the Company and vTv LLC borrowed $20.0 million.

Each loan tranche bears interest at a floating rate equal to 10.5% plus the amount by which the one-month London Interbank Offer Rate ("LIBOR") exceeds 0.5%.

The Company borrowed the first tranche of $12.5 million upon close of the Loan Agreement in October 2016. The first tranche requires only monthly interest payments until May 1, 2018 followed by equal monthly payments of principal plus accrued interest through the scheduled maturity date on May 1, 2020. In addition, a final payment for the first tranche loan equal to $0.8 million will be due on May 1, 2020, or such earlier date specified in the Loan Agreement. The Company borrowed the second tranche of $7.5 million in March 2017. The second tranche requires only monthly interest payments until October 1, 2018 followed by equal monthly

payments of principal plus accrued interest through the scheduled maturity date on October 1, 2020. In addition, a final payment for the second tranche loan equal to $0.5 million will be due on October 1, 2020, or such earlier date specified in the Loan Agreement. The availability of the third tranche of $5.0 million expired unused on June 30, 2017.

If the Company repays all or a portion of the loan prior to the applicable maturity date, it will pay the Lenders a prepayment penalty fee, based on a percentage of the then outstanding principal balance equal to 4.0% during the first 18 months following the funding of the second tranche and 2.0% thereafter.

The Company's obligations under the Loan Agreement are secured by a first priority security interest in substantially all of its assets. The Company has granted the Lenders a first priority security interest in all of the Company's intellectual property, subject to certain limited exceptions. The Company has agreed not to pledge or otherwise encumber its intellectual property assets, subject to certain exceptions.

The Loan Agreement includes customary affirmative and restrictive covenants, including, but not limited to, restrictions on the payment of dividends or other equity distributions and the incurrence of debt or liens upon the assets of the Company or its subsidiaries. The Loan Agreement does not contain any financial maintenance covenants other than a requirement to maintain a minimum cash balance of not less than $2.5 million in a deposit account pledged to secure the Loan Agreement and subject to an account control agreement. The Loan Agreement includes customary events of default, including payment defaults, covenant defaults, and material adverse change default. Upon the occurrence of an event of default and following any applicable cure periods, a default interest rate of an additional 5.0% will be applied to the outstanding loan balances, and the Lenders may declare all outstanding obligations immediately due and payable and take such other actions as set forth in the Loan Agreement.

In connection with the Loan Agreement, the Company issued to the Lenders warrants to purchase shares of the Company's Class A Common Stock (the "Warrants"). On October 28, 2016, the Company issued Warrants to purchase 152,580 shares of its Class A Common Stock at a per share exercise price of $6.39 per share, which aggregate exercise price represents 6.0% of the principal amount borrowed under the first tranche of the Loan Agreement and 3.0% of the amount available under the second tranche of the Loan Agreement. On March 24, 2017, in connection with the funding of the second tranche, the Company issued Warrants to purchase 38,006 shares of its Class A Common Stock at a per share exercise price of $5.92 per share, which aggregate exercise price represents 3.0% of the principal amount of the second tranche of the Loan Agreement. In each instance, the Warrants have an exercise price equal to the lower of (a) the volume weighted average price per share of the Company's Class A Common Stock, as reported on the principal stock exchange on which the Company's Class A Common Stock is listed, for 10 trading days prior to the issuance of the applicable Warrants or (b) the closing price of a share of the Company's Class A Common Stock on the trading day prior to the issuance of the applicable Warrants. The Warrants will expire seven years from their date of issuance.

The costs incurred in connection with the Loan Agreement, along with the allocated fair value of the Warrants issued of $0.9 million were treated as a debt discount and are offset against the carrying value of the notes payable in the Company's Condensed Consolidated Balance Sheet as of March 31, 2019 and December 31, 2018. These costs will be recognized as interest expense over the term of the first tranche using the effective interest method. The final payments for the first and second loan tranches of $0.8 million and $0.5 million, respectively, will be accrued as additional interest expense, using the effective interest method, over the term of the relevant tranche.

**Note 6: Commitments and Contingencies**

***Legal Matters***

From time to time, the Company is involved in various legal proceedings arising in the normal course of business. If a specific contingent liability is determined to be probable and can be reasonably estimated, the Company accrues and discloses the amount. The Company is not currently a party to any material legal proceedings.

***Novo Nordisk***

In February 2007, the Company entered into an Agreement Concerning Glucokinase Activator Project with Novo Nordisk A/S (the "Novo License Agreement") whereby we obtained an exclusive, worldwide, sublicensable license under certain Novo Nordisk intellectual property rights to discover, develop, manufacture, have manufactured, use and commercialize products for the prevention, treatment, control, mitigation or palliation of human or animal diseases or conditions. As part of this license grant, the Company obtained certain worldwide rights to Novo Nordisk's GKA program, including rights to preclinical and clinical compounds such as *TTP399*. Under the terms of the Novo License Agreement, the Company has additional potential developmental and regulatory milestone payments totaling up to $115.0 million for approval of a product. The Company may also be obligated to pay an additional $75.0 million in potential sales-based milestones, as well as royalty payments, at mid-single digit royalty rates, based on tiered sales of commercialized licensed products.

***Huadong License Agreement***

Under the terms of the Huadong License Agreement, vTv LLC is responsible for sponsoring the Phase 2 MRCT including sites in both the US and the Huadong License Territory for the purpose of assessing the safety and efficacy of *TTP273* in patients with type 2 diabetes. vTv LLC will be responsible for contributing up to $3.0 million in connection with the Phase 2 MRCT.

**Note 7: Leases**

The Company leases its headquarters location under an operating lease expiring in December 2019. In connection with its adoption of ASC Topic 842, the Company recognized a right of use asset and corresponding operating lease liability of $0.3 million related to this lease as of January 1, 2019. The Company elected to use the package of practical expedients in implementing ASC Topic 842 under which the Company did not reassess the operating or finance lease classification of its previously existing leases. Further, the Company did not reassess whether expired or existing contracts include leases. The discount rate used in determining the operating lease liability was 15.2%.

Operating lease cost recognized for each of the three months ended March 31, 2019 and 2018 was $0.1 million.

Future minimum lease payments under non-cancelable operating leases to be paid in 2019 as of March 31, 2019 and December 31, 2018 were $0.3 million and $0.4 million, respectively. There are no material future minimum lease payments under non-cancellable operating leases to be made in the year 2020 or thereafter.

**Note 8: Redeemable Noncontrolling Interest**

The Company is subject to the Exchange Agreement with respect to the vTv Units representing the 45.9% noncontrolling interest in vTv LLC outstanding as of March 31, 2019 (see Note 9). The Exchange Agreement requires the surrender of an equal number of vTv Units and Class B Common Stock for (i) shares of Class A Common Stock on a one-for-one basis or (ii) cash (based on the fair market value of the Class A Common Stock as determined pursuant to the Exchange Agreement), at the Company's option (as the managing member of vTv LLC), subject to customary conversion rate adjustments for stock splits, stock dividends and reclassifications. The exchange value is determined based on a 20-day volume weighted average price of the Class A Common Stock as defined in the Exchange Agreement, subject to customary conversion rate adjustments for stock splits, stock dividends and reclassifications.

The redeemable noncontrolling interest is recognized at the higher of (1) its initial fair value plus accumulated earnings/losses associated with the noncontrolling interest or (2) the redemption value as of the balance sheet date. At March 31, 2019 and December 31, 2018, the redeemable noncontrolling interest was recorded based on the redemption value as of the balance sheet date of $45.1 million and $62.5 million, respectively.

Changes in the Company's ownership interest in vTv LLC while the Company retains its controlling interest in vTv LLC are accounted for as equity transactions, and the Company is required to adjust noncontrolling interest and equity for such changes. The following is a summary of net income attributable to vTv Therapeutics Inc. and transfers to noncontrolling interest:

| | For the Three Months Ended March 31, | |
|---|---|---|
| | 2019 | 2018 |
| Net income attributable to vTv Therapeutics Inc. shareholders | $ (5,883) | $ (2,952) |
| Increase in vTv Therapeutics Inc. accumulated deficit for purchase of LLC Units as a result of common stock issuances | (7,429) | (21) |
| Change from net income attributable to vTv Therapeutics Inc. shareholders and transfers to noncontrolling interest | $ (13,312) | $ (2,973) |

**Note 9: Related-Party Transactions**

***MacAndrews & Forbes Incorporated***

As of March 31, 2019, subsidiaries and affiliates of MacAndrews & Forbes Incorporated (collectively "MacAndrews") indirectly controlled 23,084,267 shares of the Company's Class B Common Stock and 16,493,653 shares of the Company's Class A Common Stock. As a result, MacAndrews' holdings represent approximately 78.6% of the combined voting power of the Company's outstanding common stock.

The Company has entered into several agreements with MacAndrews or its affiliates as further detailed below:

*Letter Agreements*

The Company has entered into the Letter Agreements with MacAndrews. Under the terms of the Letter Agreements, the Company has the right to sell to MacAndrews shares of its Class A Common Stock at a specified price per share, and MacAndrews has the right (exercisable up to three times) to require the Company to sell to it shares of Class A Common Stock at the same price. In addition, in connection with and as a commitment fee for the entrance into certain of these Letter Agreements, the Company also issued MacAndrews warrants (the "Letter Agreement Warrants") to purchase additional shares of the Company's Class A Common Stock.

Certain terms of these Letter Agreements are set forth in the table below:

| | December 5, 2017 Letter Agreement | July 30, 2018 Letter Agreement | December 11, 2018 Letter Agreement | March 18, 2019 Letter Agreement |
|---|---|---|---|---|
| Aggregate dollar value to be sold under agreement | $10.0 million | $10.0 million | $10.0 million | $9.0 million |
| Specified purchase price per share | $ 4.38 | $ 1.33 | $ 1.84 | $ 1.65 |
| Expiration date of letter agreement | December 5, 2018 | July 30, 2019 | December 11, 2019 | March 18, 2020 |
| Shares available to be issued under related warrants | 198,267 | 518,654 | 340,534 | — |
| Exercise price of related warrants | $ 5.04 | $ 1.53 | $ 2.12 | $ — |
| Expiration date of related warrants | December 5, 2024 | July 30, 2025 | December 11, 2025 | |
| Total shares issued as of March 31, 2019 | 2,283,105 | 7,518,797 | 4,076,085 | — |
| Remaining shares to be issued as of March 31, 2019 | — | — | 1,358,698 | 5,454,546 |

The March 18, 2019 Letter Agreement resulted in a deemed distribution of $3.7 million to MacAndrews as the fair value of the financial instruments issued to MacAndrews exceeded the fair value of the financial instrument received by the Company. This deemed distribution has been reflected as an increase to the net loss attributable to common shareholders of vTv Therapeutics Inc. for computing net loss per share.

*Exchange Agreement*

The Company and MacAndrews are party to an exchange agreement (the "Exchange Agreement") pursuant to which the vTv Units (along with a corresponding number of shares of the Class B Common Stock) are exchangeable for (i) shares of the Company's Class A Common Stock on a one-for-one basis or (ii) cash (based on the fair market value of the Class A Common Stock as determined pursuant to the Exchange Agreement), at the Company's option (as the managing member of vTv LLC), subject to customary conversion rate adjustments for stock splits, stock dividends and reclassifications. Any decision to require an exchange for cash rather than shares of Class A Common Stock will ultimately be determined by the entire board of directors of vTv Therapeutics Inc. (the "Board of Directors"). As of March 31, 2019, MacAndrews had not exchanged any shares under the provisions of this agreement.

*Tax Receivable Agreement*

The Company and MacAndrews are party to a tax receivable agreement (the "Tax Receivable Agreement"), which provides for the payment by the Company to M&F TTP Holdings Two LLC ("M&F"), as successor in interest to vTv Therapeutics Holdings, LLC ("vTv Therapeutics Holdings"), and M&F TTP Holdings LLC (or certain of its transferees or other assignees) of 85% of the amount of cash savings, if any, in U.S. federal, state and local income tax or franchise tax that the Company actually realizes (or, in some circumstances, the Company is deemed to realize) as a result of (a) the exchange of Class B Common Stock, together with the corresponding number of vTv Units, for shares of the Company's Class A Common Stock (or for cash), (b) tax benefits related to imputed interest deemed to be paid by the Company as a result of the Tax Receivable Agreement and (c) certain tax benefits attributable to payments under the Tax Receivable Agreement.

As no shares have been exchanged by MacAndrews pursuant to the Exchange Agreement (discussed above), the Company has not recognized any liability nor has it made any payments pursuant to the Tax Receivable Agreement as of March 31, 2019.

*Investor Rights Agreement*

The Company is party to an investor rights agreement with M&F, as successor in interest to vTv Therapeutics Holdings (the "Investor Rights Agreement"). The Investor Rights Agreement provides M&F with certain demand, shelf and piggyback registration rights with respect to its shares of Class A Common Stock and also provides M&F with certain governance rights, depending on the size of its holdings of Class A Common Stock. Under the Investor Rights Agreement, M&F was initially entitled to nominate a majority of the members of the Board of Directors and designate the members of the committees of the Board of Directors.

**Note 10: Income Taxes**

The Company is subject to U.S. federal income taxes as well as state taxes. The Company did not record an income tax provision for the three months ended March 31, 2019 and 2018. Management has evaluated the positive and negative evidence surrounding the realization of its deferred tax assets, including the Company's history of losses, and under the applicable accounting standards determined that it is more-likely-than-not that the deferred tax assets will not be realized. The difference between the effective tax rate of the Company and the U.S. statutory tax rate of 21% at March 31, 2019 is due to the valuation allowance against the Company's expected net operating losses.

As discussed in Note 9, the Company is party to a tax receivable agreement with a related party which provides for the payment by the Company to M&F (or certain of its transferees or other assignees) of 85% of the amount of cash savings, if any, in U.S. federal, state and local income tax or franchise tax that the Company actually realizes (or, in some circumstances, the Company is deemed to realize) as a result of certain transactions. As no transactions have occurred which would trigger a liability under this agreement, the Company has not recognized any liability related to this agreement as of March 31, 2019.

**Note 11: Net Loss per Share**

Basic loss per share is computed by dividing net loss attributable to vTv Therapeutics Inc. by the weighted-average number of shares of Class A Common Stock outstanding during the period. Diluted loss per share is computed giving effect to all potentially dilutive shares. Diluted loss per share for all periods presented is the same as basic loss per share as the inclusion of potentially issuable shares would be antidilutive.

A reconciliation of the numerator and denominator used in the calculation of basic and diluted net loss per share of Class A Common Stock is as follows (in thousands, except share and per share amounts):

| | For the Three Months Ended March 31, | |
|---|---|---|
| | **2019** | **2018** |
| Numerator: | | |
| Net loss | $ (3,982) | $ (9,960) |
| Less: Net loss attributable to noncontrolling interests | (1,827) | (7,008) |
| Net loss attributable to vTv Therapeutics Inc. | (2,155) | (2,952) |
| Less: Deemed distribution to related party (Note 9) | (3,728) | — |
| Net loss attributable to common shareholders of vTv Therapeutics Inc., basic and diluted | (5,883) | (2,952) |
| Denominator: | | |
| Weighted-average vTv Therapeutics Inc. Class A Common Stock, basic and diluted | 22,862,907 | 9,699,721 |
| Net loss per share of vTv Therapeutics Inc. Class A Common Stock, basic and diluted | $ (0.26) | $ (0.30) |

Potentially dilutive securities not included in the calculation of diluted net loss per share are as follows:

| | March 31, 2019 | March 31, 2018 |
|---|---|---|
| Class B Common Stock (1) | 23,094,221 | 23,094,221 |
| Common stock options granted under the Plan | 2,665,860 | 1,990,732 |
| Restricted stock units | 11,667 | 23,334 |
| Common stock options granted under Letter Agreements | 6,813,244 | 2,283,105 |
| Common stock warrants | 1,248,041 | 388,853 |
| Total | 33,833,033 | 27,780,245 |

(1) Shares of Class B Common Stock do not share in the Company's earnings and are not participating securities. Accordingly, separate presentation of loss per share of Class B Common Stock under the two-class method has not been provided. Each share of Class B Common Stock (together with a corresponding vTv Unit) is exchangeable for one share of Class A Common Stock.

**Note 12: Restructuring**

In December 2018, the Company initiated a corporate restructuring to align with a strategic decision to continue the development of its drug candidates using external resources rather than internal resources. The restructuring will allow the Company to reduce costs while continuing to conduct clinical trials, to support existing partnerships that are advancing development of additional assets, and to pursue new licensing and partnership opportunities. This restructuring included a significant reduction in its workforce. The Company expects to complete the reductions in headcount, including the payment of employee severance and benefits, in the second quarter of 2019.

During the three months ended March 31, 2019, the Company made cash payments of $0.3 million related to these severance benefits and recognized an immaterial amount of expense related to this plan. As of March 31, 2019, the remaining severance accrual was a de minimis amount.

**Note 13: Fair Value of Financial Instruments**

The carrying amount of certain of the Company's financial instruments, including cash and cash equivalents, net accounts receivable, accounts payable and other accrued liabilities approximate fair value due to their short-term nature.

The fair value of the Company's Loan Agreement is considered to approximate its carrying value because it bears interest at a variable interest rate.

The Company measures the value of its investment in Reneo at cost minus impairment, if any, plus or minus changes resulting from observable price changes in orderly transactions for the identical or similar investment. During the three months ended March 31, 2019, there were no observable price changes in identical or similar investments, nor were there any indications of impairment. As such, the value of the Company's investment in Reneo was not remeasured.

***Assets and Liabilities Measured at Fair Value on a Recurring Basis***

The Company evaluates its financial assets and liabilities subject to fair value measurements on a recurring basis to determine the appropriate level in which to classify them for each reporting period. This determination requires significant judgments. The following table summarizes the conclusions reached regarding fair value measurements as of March 31, 2019 and December 31, 2018 (in thousands):

| | Balance at March 31, 2019 | Quoted Prices in Active Markets for Identical Assets (Level 1) | Significant Other Observable Inputs (Level 2) | Significant Unobservable Inputs (Level 3) |
|---|---|---|---|---|
| Warrant liability, related party (1) | $ 1,515 | $ — | $ — | $ 1,515 |
| **Total** | $ 1,515 | $ — | $ — | $ 1,515 |

| | Balance at December 31, 2018 | Quoted Prices in Active Markets for Identical Assets (Level 1) | Significant Other Observable Inputs (Level 2) | Significant Unobservable Inputs (Level 3) |
|---|---|---|---|---|
| Warrant liability, related party (1) | $ 2,436 | $ — | $ — | $ 2,436 |
| **Total** | $ 2,436 | $ — | $ — | $ 2,436 |

(1) Fair value determined using the Black-Scholes option pricing model. Expected volatility is based on a portfolio of selected stocks of companies believed to have market and economic characteristics similar to its own. The risk-free rate is based on the U.S. Treasury yield curve in effect at the time of the valuation.

| | Changes in Level 3 instruments for the three months ended March 31, | | | | |
|---|---|---|---|---|---|
| | Balance at January 1 | Net Change in fair value included in earnings | Purchases / Issuance | Sales / Repurchases | Balance at March 31, |
| **2019** | | | | | |
| Warrant liability, related party | 2,436 | (921) | — | — | 1,515 |
| **Total** | $ 2,436 | $ (921) | $ — | $ — | $ 1,515 |
| **2018** | | | | | |
| Warrant liability, related party | $ 492 | $ 25 | $ — | $ — | $ 517 |
| **Total** | $ 492 | $ 25 | $ — | $ — | $ 517 |

During the three months ended March 31, 2019 and 2018, the Company recognized a gain of $0.9 million and an insignificant amount, respectively, related to the change in fair value of the Letter Agreement Warrants. This gain was recognized as a component of other income – related party in the Condensed Consolidated Statements of Operations. Significant inputs utilized in the valuation of the Letter Agreement Warrants as of March 31, 2019 were:

| | March 31, 2019 | December 31, 2018 |
|---|---|---|
| Expected volatility | 110.91% - 118.53% | 108.53% - 115.04% |
| Risk-free interest rate | 2.26% - 2.30% | 2.59% - 2.69% |

Changes in the unobservable inputs noted above would impact the amount of the liability for the Letter Agreement Warrants. Increases (decreases) in the estimates of the Company's annual volatility would increase (decrease) the liability and an increase (decrease) in the annual risk-free rate would increase (decrease) the liability.

## ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

*As used in this Quarterly Report on Form 10-Q, the "Company", the "Registrant", "we" or "us" refer to vTv Therapeutics Inc. and "vTv LLC" refers to vTv Therapeutics LLC. The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our financial statements and related notes that appear elsewhere in this report. In addition to historical financial information, the following discussion contains forward-looking statements that reflect our plans, estimates, assumptions and beliefs. Our actual results could differ materially from those discussed in the forward-looking statements. Factors that could cause or contribute to these differences include those discussed below and elsewhere in this report under "Part II, Other Information—Item 1A, Risk Factors." Forward-looking statements include information concerning our possible or assumed future results of operations, business strategies and operations, financing plans, potential growth opportunities, potential market opportunities, potential results of our drug development efforts or trials, and the effects of competition. Forward-looking statements include all statements that are not historical facts and can be identified by terms such as "anticipates," "believes," "could," "seeks," "estimates," "expects," "intends," "may," "plans," "potential," "predicts," "projects," "should," "will," "would" or similar expressions and the negatives of those terms. Given these uncertainties, you should not place undue reliance on these forward-looking statements. Also, forward-looking statements represent our management's plans, estimates, assumptions and beliefs only as of the date of this report. Except as required by law, we assume no obligation to update these forward-looking statements publicly or to update the reasons actual results could differ materially from those anticipated in these forward-looking statements, even if new information becomes available in the future.*

### Overview

We are a clinical-stage biopharmaceutical company engaged in the discovery and development of orally administered small molecule drug candidates to fill significant unmet medical needs. We have a pipeline of clinical drug candidates, led by our programs for the treatment of Alzheimer's disease ("AD") and diabetes. Our drug candidate for the treatment of AD, *azeliragon* (*TTP488*), is an orally administered, small molecule antagonist targeting the receptor for advanced glycation endproducts ("RAGE"). We are performing start-up activities and expect to begin screening patients in June 2019 for a Phase 2 trial to evaluate *azeliragon* as a potential treatment of mild-AD in patients with type 2 diabetes. Our type 2 diabetes drug candidates are *TTP399*, an orally administered, liver-selective glucokinase activator ("GKA"), which successfully completed a Phase 2b clinical trial in type 2 diabetes (the "AGATA Study"), and *TTP273*, an orally administered, non-peptide agonist that targets the glucagon-like peptide-1 receptor ("GLP-1r"), which successfully completed a Phase 2 clinical trial in type 2 diabetes (the "LOGRA Study"). We are currently investigating *TTP399* as a treatment for type 1 diabetes in an Phase 2 study in partnership with JDRF International ("JDRF"). In addition, we are furthering the development of our peroxisome proliferation activated receptor delta ("PPAR-δ") agonist and phosphodiesterase type 4 ("PDE4") programs through partnerships with pharmaceutical partners via licensing arrangements. Finally, we continue to advance our NRF2 pathway program via research agreements with academic and industry collaborators.

The following table summarizes our current drug candidates and their respective stages of development:

**Our Alzheimer's Program – *Azeliragon***

***Sequential Phase 2 and Phase 3 Studies in Mild-AD patients with Type 2 Diabetes***

We are performing start-up activities for a clinical trial to evaluate *azeliragon* as a potential treatment of mild-AD in patients with type 2 diabetes that consists of sequential phase 2 and phase 3 studies operationally conducted under a single clinical trial protocol (the "488-305 Study"). The Phase 2 study is designed to enroll approximately 100 patients to evaluate the impact of six months of treatment with *azeliragon* on cognitive performance as measured by the change from baseline in the Alzheimer's Disease Assessment Scale – Cognitive Subscale ("ADAS-$COG_{14}$"). We expect to begin screening patients in June 2019 for the Phase 2 clinical trial and to report top-line results from the Phase 2 study by the end of the fourth quarter of 2020. The Phase 3 study is designed to enroll approximately 200 patients to evaluate the efficacy of 18 months of treatment with *azeliragon* on cognition and global function as measured by the change from baseline in the ADAS-$COG_{14}$ and Clinical Dementia Rating Scale Sum of Boxes ("CDR-SB"). The design of the Phase 3 study may be adapted based on the results of the Phase 2 study.

**Holding Company Structure**

vTv Therapeutics Inc. is a holding company, and its principal asset is a controlling equity interest in vTv Therapeutics LLC ("vTv LLC"), the principal operating subsidiary. We have determined that vTv LLC is a variable-interest entity ("VIE") for accounting purposes and that vTv Therapeutics Inc. is the primary beneficiary of vTv LLC because (through its managing member interest in vTv LLC and the fact that the senior management of vTv Therapeutics Inc. is also the senior management of vTv LLC) it has the power to direct all of the activities of vTv LLC, which include those that most significantly impact vTv LLC's economic performance. vTv Therapeutics Inc. has therefore consolidated vTv LLC's results under the VIE accounting model in its consolidated financial statements.

**Financial Overview**

***Revenue***

To date, we have not generated any revenue from drug sales. Our revenue has been primarily derived from up-front proceeds and research fees under collaboration and license agreements.

In the future, we may generate revenue from a combination of product sales, license fees, milestone payments and royalties from the sales of products developed under licenses of our intellectual property. We expect that any revenue we generate will fluctuate from quarter to quarter as a result of the timing and amount of license fees, milestone and other payments, and the amount and timing of payments that we receive upon the sale of our products, to the extent any are successfully commercialized. If we fail to complete the development of our drug candidates in a timely manner or obtain regulatory approval for them, our ability to generate future revenue and our results of operations and financial position will be materially adversely affected.

***Research and Development Expenses***

Since our inception, we have focused our resources on our research and development activities, including conducting preclinical studies and clinical trials, manufacturing development efforts and activities related to regulatory filings for our drug candidates. We recognize research and development expenses as they are incurred. Our direct research and development expenses consist primarily of external costs such as fees paid to investigators, consultants, central laboratories and clinical research organizations ("CRO(s)") in connection with our clinical trials, and costs related to acquiring and manufacturing clinical trial materials. Our indirect research and development costs consist primarily of cash and share-based compensation costs, the cost of employee benefits and related overhead expenses for personnel in research and development functions. Since we typically use our employee and infrastructure resources across multiple research and development programs such costs are not allocated to the individual projects.

From our inception, including our predecessor companies, through March 31, 2019, we have incurred approximately $567.7 million in research and development expenses.

Our research and development expenses by project for the three months ended March 31, 2019 and 2018 were as follows (in thousands):

| | Three Months Ended March 31, | |
|---|---|---|
| | 2019 | 2018 |
| Direct research and development expense: | | |
| *Azeliragon* | $ 703 | $ 6,558 |
| *TTP399* | 600 | 215 |
| Other projects | 192 | 124 |
| Indirect research and development expense | 1,327 | 2,046 |
| Total research and development expense | $ 2,822 | $ 8,943 |

We expect our research and development expenses to increase as we finalize start-up activities and begin screening for the Phase 2 portion of the 488-305 Study as well as the enrollment of patients in Part 2 of the Simplici-T1 study, subject to the availability of additional funding. To the extent we initiate further development of *azeliragon* or our other programs, our expenses, cash needs and operating losses may further increase.

The successful development of our clinical and preclinical drug candidates is highly uncertain. At this time, we cannot reasonably estimate the nature, timing or costs of the efforts that will be necessary to complete the remainder of the development of any of our clinical or preclinical drug candidates or the period, if any, in which material net cash inflows from these drug candidates may commence. This is due to the numerous risks and uncertainties associated with the development of our drug candidates, including:

- the uncertainty of the scope, rate of progress and expense of our ongoing, as well as any additional, clinical trials and other research and development activities;
- the potential benefits of our candidates over other therapies;
- our ability to market, commercialize and achieve market acceptance for any of our drug candidates that we are developing or may develop in the future;
- future clinical trial results;
- our ability to enroll patients in our clinical trials;
- the timing and receipt of regulatory approvals, if any; and
- the filing, prosecuting, defending and enforcing of patent claims and other intellectual property rights, and the expense of doing so.

A change in the outcome of any of these variables with respect to the development of a drug candidate could mean a significant change in the costs and timing associated with the development of that drug candidate. For example, if the FDA or another regulatory authority were to require us to conduct clinical trials beyond those that we currently anticipate will be required for the completion of clinical development of a drug candidate, or if we experience significant delays in enrollment in any of our clinical trials, we could be required to expend significant additional financial resources and time with respect to the development of that drug candidate.

***General and Administrative Expenses***

General and administrative expenses consist primarily of salaries, benefits and related costs for employees in executive, finance, corporate development, human resources and administrative support functions. Other significant general and administrative expenses include accounting and legal services, expenses associated with obtaining and maintaining patents, cost of various consultants, occupancy costs and information systems.

***Interest Expense***

Interest expense primarily consists of cash and non-cash interest expense related to our Loan Agreement. Cash interest on the Loan Agreement is recognized at a floating interest rate equal to 10.5% plus the amount by which the one-month London Interbank Offer Rate (“LIBOR”) exceeds 0.5%. Non-cash interest expense represents the amortization of the costs incurred in connection with the Loan Agreement, the allocated fair value of the warrants to purchase shares of our Class A Common Stock issued in connection with the Loan Agreement (the “Warrants”) and the accretion of the final interest payments (which will be paid in cash upon loan maturity), all of which are recognized in our Condensed Consolidated Statement of Operations using the effective interest method.

**Results of Operations**

***Comparison of the three months ended March 31, 2019 and 2018***

The following table sets forth certain information concerning our results of operations for the periods shown:

| (dollars in thousands) Statement of operations data: | Three Months Ended March 31, 2019 | 2018 | Change |
|---|---|---|---|
| Revenue | $ 921 | $ 2,064 | $ (1,143) |
| Operating expenses: | | | |
| Research and development | 2,822 | 8,943 | (6,121) |
| General and administrative | 2,386 | 2,255 | 131 |
| Total operating expenses | 5,208 | 11,198 | (5,990) |
| Operating loss | (4,287) | (9,134) | 4,847 |
| Interest income | 10 | 18 | (8) |
| Interest expense | (626) | (855) | 229 |
| Other income, net | 921 | 11 | 910 |
| Loss before income taxes | (3,982) | (9,960) | 5,978 |
| Income tax provision | — | — | — |
| Net loss before noncontrolling interest | (3,982) | (9,960) | 5,978 |
| Less: net loss attributable to noncontrolling interest | (1,827) | (7,008) | 5,181 |
| Net loss attributable to vTv Therapeutics Inc. | $ (2,155) | $ (2,952) | $ 797 |

***Revenue***

Revenue was $0.9 million for the three months ended March 31, 2019 and $2.0 million for the three months ended March 31, 2018. The revenue earned during the three months ended March 31, 2019 relates primarily to the Reneo License Agreement, while for the three months ended March 31, 2018 we recognized revenue related to both the Reneo License Agreement and the Huadong License Agreement. We recognize the portion of the consideration received allocated to the license performance obligation for each of these agreements over the requisite knowledge transfer or research service periods in accordance with the applicable accounting guidance. The portion of revenue allocated to the other performance obligations under the license agreements will be recognized as performance occurs.

***Research and Development Expenses***

Research and development expenses were $2.8 million and $8.9 million for the three months ended March 31, 2019 and 2018, respectively. The decrease in research and development expenses during the period of $6.1 million, or 68.4%, was primarily due to a decrease in clinical trial costs of $5.9 million for *azeliragon* which was mainly driven by a decrease in spending caused by the termination of our STEADFAST and open-label extension ("OLE") studies in early April 2018. Additionally, we saw a reduction in personnel costs of approximately $0.5 million due to the corporate restructuring announced in December 2018. Such decreases were offset by $0.3 million of higher spending on the Simplici-T1 study. During the first quarter of 2019, we were conducting Part 1 of this study, while in the first quarter of 2018, we were beginning startup activities for the sentinel phase.

***General and Administrative Expenses***

General and administrative expenses were relatively consistent between periods at $2.4 million and $2.3 million for the three months ended March 31, 2019 and 2018, respectively.

***Interest Expense***

Interest expense was $0.6 million and $0.9 million for the three months ended March 31, 2019 and 2018, respectively. Interest expense relates to the cash and non-cash interest for our Loan Agreement which bears interest at 10.5% plus the amount by which the one-month LIBOR exceeds 0.5%.

**Liquidity and Capital Resources**

*Liquidity and Going Concern*

As of March 31, 2019, we have an accumulated deficit of $220.5 million as well as a history of negative cash flows from operating activities. We anticipate that we will continue to incur losses for the foreseeable future as we continue our clinical trials. Further, we expect that we will need additional capital to continue to fund our operations. As of March 31, 2019, our liquidity sources

included cash and cash equivalents of $5.0 million and the $11.5 million of remaining funds available under the letter agreements entered into with MacAndrews and Forbes Group LLC ("MacAndrews") (the "Letter Agreements"). Based on our current operating plan, we believe that our current cash and cash equivalents and remaining funds available under the Letter Agreements will allow us to meet our liquidity requirements into the third quarter of fiscal 2019. These factors raise substantial doubt regarding our ability to continue as a going concern.

We are performing start-up activities for the 488-305 Study and expect to begin screening patients in June 2019. Further, we continue to conduct the Phase 2 clinical trial of *TTP399* in patients with type 1 diabetes. In order to complete these trials and continue its operations, we will require additional financing. We are evaluating several financing strategies to provide continued funding which may include additional direct equity investments or future public offerings of our common stock. The timing and availability of such financing is not yet known.

*Letter Agreements*

We have entered into the Letter Agreements with MacAndrews. Under the terms of these letter agreements, we have the right to sell to MacAndrews shares of its Class A Common Stock at a specified price per share, and MacAndrews has the right (exercisable up to three times) to require us to sell to it shares of Class A Common Stock at the same price. In addition, in connection with the entrance into certain of these Letter Agreements, we also issued MacAndrews warrants (the "Letter Agreement Warrants") to purchase additional shares of our Class A Common Stock.

Certain terms of these Letter Agreements are set forth in the table below:

| | December 5, 2017 Letter Agreement | July 30, 2018 Letter Agreement | December 11, 2018 Letter Agreement | March 18, 2019 Letter Agreement |
|---|---|---|---|---|
| Aggregate dollar value to be sold under agreement | $10.0 million | $10.0 million | $10.0 million | $9.0 million |
| Specified purchase price per share | $ 4.38 | $ 1.33 | $ 1.84 | $ 1.65 |
| Expiration date of letter agreement | December 5, 2018 | July 30, 2019 | December 11, 2019 | March 18, 2020 |
| Shares available to be issued under related warrants | 198,267 | 518,654 | 340,534 | — |
| Exercise price of related warrants | $ 5.04 | $ 1.53 | $ 2.12 | $ — |
| Expiration date of related warrants | December 5, 2024 | July 30, 2025 | December 11, 2025 | |
| Total shares issued as of March 31, 2019 | 2,283,105 | 7,518,797 | 4,076,085 | — |
| Remaining shares to be issued as of March 31, 2019 | — | — | 1,358,698 | 5,454,546 |

*Debt Transaction*

In October 2016, we and vTv LLC entered into the Loan Agreement, under which we have borrowed $20.0 million. Each loan tranche bears interest at a floating rate equal to 10.5% plus the amount by which the one-month LIBOR exceeds 0.5%.

We borrowed the first tranche of $12.5 million upon the close of the Loan Agreement in October 2016. The first tranche required only monthly interest payments until May 1, 2018, followed by equal monthly payments of principal plus accrued interest through the scheduled maturity date on May 1, 2020. In addition, a final payment for the first tranche loan equal to $0.8 million will be due on May 1, 2020, or such earlier date specified in the Loan Agreement. We borrowed the second tranche of $7.5 million in March 2017. The second tranche requires only monthly interest payments until October 1, 2018, followed by equal monthly payments of principal plus accrued interest through the scheduled maturity date on October 1, 2020. In addition, a final payment for the second tranche loan equal to $0.5 million will be due on October 1, 2020, or such earlier date specified in the Loan Agreement. The availability of the third tranche of $5.0 million expired unused on June 30, 2017.

If we repay all or a portion of the loan prior to the applicable maturity date, we will pay the Lenders a prepayment penalty fee, based on a percentage of the then outstanding principal balance equal to 4.0% during the first 18 months following the funding of the second tranche and 2.0% thereafter.

In connection with the Loan Agreement, we have issued to the Lenders warrants to purchase shares of our Class A Common Stock (the "Warrants"). On October 28, 2016, we issued Warrants to purchase 152,580 shares of our Class A Common Stock at a per share exercise price of $6.39 per share, which aggregate exercise price represents 6.0% of the principal amount borrowed under the first tranche of the Loan Agreement and 3.0% of the amount available under the second tranche of the Loan Agreement. On March 24, 2017, in connection with the funding of the second tranche, we issued Warrants to purchase 38,006 shares of our Class A Common Stock at a per share exercise price of $5.92 per share, which aggregate exercise price represents 3.0% of the principal amount of the second tranche. In each instance, the Warrants have an exercise price equal to the lower of (a) the volume weighted average price per share of our Class A Common Stock, as reported on the principal stock exchange on which our Class A Common Stock is listed, for 10 trading days prior to the issuance of the applicable Warrants or (b) the closing price of a share of our Class A Common Stock on the trading day prior to the issuance of the applicable Warrants. The Warrants will expire seven years from their date of issuance.

The Loan Agreement includes customary affirmative and restrictive covenants, including, but not limited to, restrictions on the payment of dividends or other equity distributions and the incurrence of debt or liens upon the assets of the Company or its subsidiaries. The Loan Agreement does not contain any financial maintenance covenants other than a requirement to maintain a minimum cash balance of not less than $2.5 million in a deposit account pledged to secure the Loan Agreement and subject to an account control agreement. The Loan Agreement includes customary events of default, including payment defaults, covenant defaults, and material adverse change default. Upon the occurrence of an event of default and following any applicable cure periods, a default interest rate of an additional 5.0% will be applied to the outstanding loan balances, and the Lenders may declare all outstanding obligations immediately due and payable and take such other actions as set forth in the Loan Agreement. We have granted the Lenders a first priority security interest in all of our intellectual property, subject to certain limited exceptions.

***Cash Flows***

| | Three Months Ended March 31, | |
|---|---|---|
| | 2019 | 2018 |
| (dollars in thousands) | | |
| Net cash used in operating activities | $ (5,450) | $ (5,397) |
| Net cash provided by investing activities | — | 12 |
| Net cash provided by financing activities | 8,726 | — |
| Net increase (decrease) in cash and cash equivalents | $ 3,276 | $ (5,385) |

***Operating Activities***

For the three months ended March 31, 2019, our net cash used in operating activities increased $0.1 million from the three months ended March 31, 2018. While the overall cash used in operating activities is consistent between periods, the net loss and working capital changes for the three months ended March 31, 2019 were significantly less. The reduction in net loss between these periods was primarily driven by the cessation of the STEADFAST Study in April 2018. Further, the working capital changes for the three months ended March 31, 2018 included the receipt of approximately $7.8 million in receivables related to an upfront payment for our Huadong License Agreement.

***Investing Activities***

For the three months ended March 31, 2019 and 2018, net cash used in investing activities was insignificant.

***Financing Activities***

For the three months ended March 31, 2019, net cash provided by financing activities include the receipt of cash of approximately $6.0 million from the issuance of common stock under the Letter Agreements. Additionally, we received net proceeds of approximately $5.4 million through a registered direct offering of our Class A Common Stock.

***Future Funding Requirements***

To date, we have not generated any revenue from drug product sales. We do not know when, or if, we will generate any revenue from drug product sales. We do not expect to generate revenue from drug sales unless and until we obtain regulatory approval of and commercialize any of our drug candidates. We anticipate that we will need substantial additional funding in connection with our continuing operations.

Based on our current operating plan, we believe that our current cash and cash equivalents and remaining funds available under the Letter Agreements will allow us to meet our liquidity requirements into the third quarter of 2019. We are performing start-up activities for the 488-305 Study and expect to begin screening patients in June 2019. Further, we continue to conduct the Phase 2

clinical trial of *TTP399* in patients with type 1 diabetes. In order to complete these trials and continue its operations, we will require additional financing. We are evaluating several financing strategies to provide continued funding, which may include additional direct equity investments or future public offerings of our common stock. The timing and availability of such financing is not yet known.

We have based our estimates on assumptions that may prove to be wrong, and we may use our available capital resources sooner than we currently expect. Because of the numerous risks and uncertainties associated with the development and commercialization of our drug candidates, we are unable to estimate the amounts of increased capital outlays and operating expenditures necessary to complete the development of our drug candidates.

Our future capital requirements will depend on many factors, including:

- the progress, costs, results and timing of our planned 488-305 Study;
- the outcome, costs and timing of seeking and obtaining FDA and any other regulatory approvals;
- the number and characteristics of drug candidates that we pursue, including our drug candidates in preclinical and clinical development;
- the ability of our drug candidates to progress through clinical development successfully;
- our need to expand our research and development activities;
- the costs associated with securing, establishing and maintaining commercialization capabilities;
- the costs of acquiring, licensing or investing in businesses, products, drug candidates and technologies;
- our ability to maintain, expand and defend the scope of our intellectual property portfolio, including the amount and timing of any payments we may be required to make, or that we may receive, in connection with the licensing, filing, prosecution, defense and enforcement of any patents or other intellectual property rights;
- our need and ability to retain management and scientific and medical personnel;
- the effect of competing technological and market developments;
- our need to implement additional internal systems and infrastructure, including financial and reporting systems;
- the economic and other terms, timing and success of our existing licensing arrangements and any collaboration, licensing or other arrangements into which we may enter in the future; and
- the amount of any payments we are required to make to M&F TTP Holdings Two LLC in the future under the Tax Receivable Agreement.

Until such time, if ever, as we can generate substantial revenue from drug sales, we expect to finance our cash needs through a combination of equity offerings, debt financings, marketing and distribution arrangements and other collaborations, strategic alliances and licensing arrangements. We do not currently have any committed external source of funds other than those available through the Letter Agreements. To the extent that we raise additional capital through the sale of equity or convertible debt securities, the ownership interests of our common stockholders will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect the rights of our common stockholders. Debt financing and preferred equity financing, if available, may involve agreements that include covenants that will further limit or restrict our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. If we raise additional funds through collaborations, strategic alliances or marketing, distribution or licensing arrangements with third parties, we may be required to relinquish valuable rights to our technologies, future revenue streams or drug candidates or grant licenses on terms that may not be favorable to us. If we are unable to obtain additional funding, we could be forced to delay, reduce or eliminate our research and development programs or commercialization efforts, which could adversely affect our business prospects.

**Off-Balance Sheet Arrangements**

We have entered into the Letter Agreements with MacAndrews and Forbes Group LLC which, as of March 31, 2019, provide us the right to sell to MacAndrews an additional 1,358,698 shares of our Class A Common Stock at a price equal to $1.84 per share and an additional 5,454,546 shares of our Class A Common Stock at a price of $1.65 per share. Further, MacAndrews has the right (exercisable up to three times) to require us to sell to it an equal number of shares of Class A Common Stock at the same prices. As of March 31, 2019, we had received funding of $27.5 million under the Letter Agreements and, in exchange, had issued a total of 13,877,987 shares of our Class A Common Stock.

**Discussion of Critical Accounting Policies**

For a discussion of our critical accounting policies and estimates, please refer to Part II, Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our Annual Report on Form 10-K for the year ended December 31, 2018. Significant changes made to our critical accounting policies and estimates in 2019 with respect to our adoption of Accounting Standards Codification Topic 842 "Leases" are discussed within Note 2 of the Condensed Consolidated Financial Statements included in Item 1 of this Quarterly Report on Form 10-Q.

**Forward-Looking Statements**

This quarterly report includes certain forward-looking statements within the meaning of the federal securities laws regarding, among other things, our management's intentions, plans, beliefs, expectations or predictions of future events, which are considered forward-looking statements. You should not place undue reliance on those statements because they are subject to numerous uncertainties and factors relating to our operations and business environment, all of which are difficult to predict and many of which are beyond our control. Forward-looking statements include information concerning our possible or assumed future results of operations, including descriptions of our business strategy. These statements often include words such as "may," "will," "should," "believe," "expect," "anticipate," "intend," "plan," "estimate" or similar expressions. These statements are based upon assumptions that we have made in light of our experience in the industry, as well as our perceptions of historical trends, current conditions, expected future developments and other factors that we believe are appropriate under the circumstances. As you read this quarterly report, you should understand that these statements are not guarantees of performance or results. They involve known and unknown risks, uncertainties and assumptions, including those described under the heading "Risk Factors" under Item 1A of Part I in our Annual Report on Form 10-K and under Item 1A of Part II of this Quarterly Report on Form 10-Q. Although we believe that these forward-looking statements are based upon reasonable assumptions, you should be aware that many factors, including those described under the heading "Risk Factors" under Item 1A of Part I in our Annual Report on Form 10-K and under Item 1A of Part II of this Quarterly Report on Form 10-Q, could affect our actual financial results or results of operations and could cause actual results to differ materially from those in the forward-looking statements.

Our forward-looking statements made herein are made only as of the date of this quarterly report. We expressly disclaim any intent, obligation or undertaking to update or revise any forward-looking statements made herein to reflect any change in our expectations with regard thereto or any change in events, conditions or circumstances on which any such statements are based. All subsequent written and oral forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by the cautionary statements contained in this quarterly report.

**Effect of Recent Accounting Pronouncements**

See discussion of recent accounting pronouncements in Note 2, "Summary of Significant Accounting Policies", to the Condensed Consolidated Financial Statements in this Form 10-Q.

## ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

***Interest Rate Risk***

Our Loan Agreement bears interest at a floating rate equal to 10.5% plus the amount by which the one-month LIBOR exceeds 0.5%. A one percent increase in the variable rate of interest on the Loan Agreement would increase interest expense by approximately $0.1 million annually based on the amounts currently outstanding. We do not currently hedge our interest rate exposure.

***Market Risk***

Our exposure to market risk is limited to our cash and cash equivalents, all of which have maturities of one year or less. The goals of our investment strategy are preservation of capital, fulfillment of liquidity needs and fiduciary control of cash and investments. We also seek to maximize income from our investments without assuming significant risk. To achieve our goals, we maintain a portfolio of cash equivalents and investments in a variety of securities that management believes to be of high credit quality. The securities in our investment portfolio are not leveraged and are, due to their short-term nature, subject to minimal interest rate risk. Because of the short-term maturities of our investments, we do not believe that an increase in market rates would have a material negative impact on the value of our investment portfolio.

***Foreign Currency Risk***

We do not have any material foreign currency exposure.

## ITEM 4. CONTROLS AND PROCEDURES

**Evaluation of Disclosure Controls and Procedures**

Under the supervision and with the participation of our Chief Executive Officer and Chief Financial Officer, management has evaluated the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rules 13a-15(e) or 15d-15(e) of the Securities Exchange Act of 1934) as of March 31, 2019. Based upon that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that, as of March 31, 2019, our disclosure controls and procedures were effective in causing material information relating to us (including our consolidated subsidiaries) to be recorded, processed, summarized and reported by management on a timely basis and to ensure the quality and timeliness of our public disclosures pursuant to SEC disclosure obligations.

Our management, including our Chief Executive Officer and Chief Financial Officer, does not expect that our disclosure controls and procedures will prevent all errors and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, with the Company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty and that breakdowns can occur because of simple error and mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by management override of controls.

The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Over time, a control may become inadequate because of changes in conditions or because the degree of compliance with the policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and may not be detected.

**Changes to Internal Control over Financial Reporting**

There have been no changes in our internal control over financial reporting during our most recent fiscal quarter that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

**Website Availability of Reports and other Corporate Governance Information**

The Company maintains a comprehensive corporate governance program, including Corporate Governance Guidelines for its Board of Directors, Board Guidelines for Assessing Director Independence and charters for its Audit Committee, Nominating and Corporate Governance Committee and Compensation Committee. The Company maintains a corporate investor relations website, www.vtvtherapeutics.com, where stockholders and other interested persons may review, without charge, among other things, corporate governance materials and certain SEC filings, which are generally available on the same business day as the filing date with the SEC on the SEC's website http://www.sec.gov.

# PART II – OTHER INFORMATION

## ITEM 1. LEGAL PROCEEDINGS

We are not currently a party to any material legal proceedings.

## ITEM 1A. RISK FACTORS

In addition to the other information in this report, investors should carefully consider the risk factors set forth under the heading "Risk Factors" under Item 1A of Part I in our Annual Report on Form 10-K for the year ended December 31, 2018.

## ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

There were no sales of unregistered equity securities during the three months ended March 31, 2019 that have not previously been included in a Current Report on Form 8-K.

Our ability to pay dividends is restricted by our Loan Agreement. See "Management's Discussion and Analysis of Financial Condition and Results of Operations".

**ITEM 3. DEFAULTS UPON SENIOR SECURITIES**

None.

**ITEM 4. MINE SAFETY DISCLOSURES**

None.

**ITEM 5. OTHER INFORMATION**

None.

**ITEM 6. EXHIBITS**

| Exhibit Number | Description |
|---|---|
| 31.1 | Certification of President and Chief Executive Officer required by Rule 13a-14(a)/15d-14(a) under 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 Chief Financial Officer required by Rule 13a-14(a)/15d-14(a) under 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 President and Chief 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 Chief 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 |
| 101.CAL | XBRL Taxonomy Extension Calculation Linkbase |
| 101.DEF | XBRL Taxonomy Extension Definition Document |
| 101.LAB | XBRL Taxonomy Extension Label Linkbase |
| 101.PRE | XBRL Taxonomy Extension Presentation Linkbase |

**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.

Date: May 1, 2019

VTV THERAPEUTICS INC.
(Registrant)

By: /s/ Stephen L. Holcombe
Stephen L. Holcombe
President and Chief Executive Officer

By: /s/ Rudy C. Howard
Rudy C. Howard
Chief Financial Officer

**Exhibit 31.1**

SECTION 302 CERTIFICATION

I, Stephen L. Holcombe, certify that:

1. I have reviewed this quarterly report on Form 10-Q of vTv Therapeutics Inc. (the "registrant");

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;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Securities Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 1, 2019

By: /s/ Stephen L. Holcombe
Stephen L. Holcombe
President and Chief Executive Officer

**Exhibit 31.2**

SECTION 302 CERTIFICATION

I, Rudy C. Howard, certify that:

1. I have reviewed this quarterly report on Form 10-Q of vTv Therapeutics Inc. (the "registrant");

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;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Securities Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 1, 2019

By: /s/ Rudy C. Howard
Rudy C. Howard
Chief 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 the Quarterly Report of vTv Therapeutics Inc. (the "Company") on Form 10-Q for the period ended March 31, 2019 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Stephen L. Holcombe, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, in my capacity as an officer of the Company 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; 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: May 1, 2019

By: /s/ Stephen L. Holcombe
Stephen L. Holcombe
President and Chief Executive Officer

**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 the Quarterly Report of vTv Therapeutics Inc. (the "Company") on Form 10-Q for the period ended March 31, 2019 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Rudy C. Howard, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, in my capacity as an officer of the Company that, to my knowledge:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; 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: May 1, 2019

By: /s/ Rudy C. Howard
Rudy C. Howard
Chief Financial Officer