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 September 30, 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)

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Class A common stock, par value $0.01 per share	VTVT	NASDAQ Capital Market

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 October 30, 2019**
Class A common stock, par value $0.01 per share	36,808,933
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 SEPTEMBER 30, 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)

	September 30, 2019 (Unaudited)	December 31, 2018
Assets		
Current assets:		
Cash and cash equivalents	$ 2,436	$ 1,683
Accounts receivable, net	10	—
Prepaid expenses and other current assets	870	666
Current deposits	251	1,124
Total current assets	3,567	3,473
Restricted cash and cash equivalents, long-term	2,500	2,500
Property and equipment, net	46	70
Operating lease right-of-use assets	85	—
Long-term investments	2,480	2,480
Long-term deposits	444	36
Total assets	$ 9,122	$ 8,559
Liabilities, Redeemable Noncontrolling Interest and Stockholders' Deficit		
Current liabilities:		
Accounts payable and accrued expenses	$ 6,898	$ 7,702
Operating lease liabilities	91	—
Current portion of deferred revenue	31	1,752
Current portion of notes payable	7,442	9,383
Total current liabilities	14,462	18,837
Notes payable, net of current portion	1,363	6,330
Deferred revenue, net of current portion	1,040	1,067
Warrant liability, related party	1,878	2,436
Other liabilities	260	260
Total liabilities	19,003	28,930
Commitments and contingencies		
Redeemable noncontrolling interest	37,268	62,482
Stockholders' deficit:		
Class A Common Stock, $0.01 par value; 100,000,000 shares authorized, 35,439,070 and 20,347,065 shares outstanding as of September 30, 2019 and December 31, 2018, respectively	354	203
Class B Common Stock, $0.01 par value; 100,000,000 shares authorized, and 23,094,221 outstanding as of September 30, 2019 and December 31, 2018	232	232
Additional paid-in capital	175,990	150,595
Accumulated deficit	(223,725)	(233,883)
Total stockholders' deficit attributable to vTv Therapeutics Inc.	(47,149)	(82,853)
Total liabilities, redeemable noncontrolling interest and stockholders' deficit	$ 9,122	$ 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 September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Revenue	$ 8	$ 3,375	$ 2,757	$ 7,912
Operating expenses:				
Research and development	3,663	2,698	10,713	20,235
General and administrative	1,770	2,158	6,548	7,150
Total operating expenses	5,433	4,856	17,261	27,385
Operating loss	(5,425)	(1,481)	(14,504)	(19,473)
Other income	—	10	1	46
Other (expense) income – related party	(146)	319	1,050	610
Interest income	15	13	41	47
Interest expense	(404)	(822)	(1,544)	(2,547)
Loss before income taxes and noncontrolling interest	(5,960)	(1,961)	(14,956)	(21,317)
Income tax provision	—	—	100	200
Net loss before noncontrolling interest	(5,960)	(1,961)	(15,056)	(21,517)
Less: net loss attributable to noncontrolling interest	(2,352)	(1,165)	(6,411)	(14,697)
Net loss attributable to vTv Therapeutics Inc.	$ (3,608)	$ (796)	$ (8,645)	$ (6,820)
Net loss attributable to vTv Therapeutics Inc. common shareholders	$ (4,115)	$ (796)	$ (12,880)	$ (6,820)
Net loss per share of vTv Therapeutics Inc. Class A Common Stock, basic and diluted	$ (0.13)	$ (0.06)	$ (0.46)	$ (0.64)
Weighted-average number of vTv Therapeutics Inc. Class A Common Stock, basic and diluted	32,126,130	12,305,949	27,709,486	10,701,599

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 September 30, 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			
Balance at June 30, 2019	**$ 37,060**	**29,826,782**	**$ 298**	**23,094,221**	**$ 232**	**$ 167,125**	**$ (217,557)**	**$ (49,902)**
Net loss	(2,352)	—	—	—	—	—	(3,608)	(3,608)
Share-based compensation	—	—	—	—	—	413	—	413
Issuance of Class A Common Stock to a related party under the Letter Agreements	—	5,612,288	56	—	—	8,944	—	9,000
Issuance of Letter Agreement and warrants to purchase Class A Common Stock - related party	—	—	—	—	—	(492)	—	(492)
Change in redemption value of noncontrolling interest	2,560	—	—	—	—	—	(2,560)	(2,560)
Balances at September 30, 2019	**$ 37,268**	**35,439,070**	**$ 354**	**23,094,221**	**$ 232**	**$ 175,990**	**$ (223,725)**	**$ (47,149)**

For the three months ended September 30, 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 June 30, 2018	**$ 39,413**	**10,871,498**	**$ 109**	**23,094,221**	**$ 232**	**$ 134,587**	**$ (206,525)**	**$ (71,597)**
Net loss	(1,165)	—	—	—	—	—	(796)	(796)
Share-based compensation	—	—	—	—	—	579	—	579
Issuance of Class A Common Stock to a related party under the Letter Agreements	—	4,900,951	49	—	—	9,951	—	10,000
Issuance of Letter Agreement and warrants to purchase Class A Common stock - related party	—	—	—	—	—	(500)	—	(500)
Change in redemption value of noncontrolling interest	(18,336)	—	—	—	—	—	18,336	18,336
Balances at September 30, 2018	**$ 19,912**	**15,772,449**	**$ 158**	**23,094,221**	**$ 232**	**$ 144,617**	**$ (188,985)**	**$ (43,978)**

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 nine months ended September 30, 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	(6,411)	—	—	—	—	—	(8,645)	(8,645)
Share-based compensation	—	—	—	—	—	1,095	—	1,095
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	—	11,443,975	114	—	—	19,386	—	19,500
Issuance of Letter Agreement and warrants to purchase Class A Common Stock - related party	—	—	—	—	—	(492)	—	(492)
Vesting of restricted stock units	—	11,666	—	—	—	—	—	—
Change in redemption value of noncontrolling interest	(18,803)	—	—	—	—	—	18,803	18,803
Balances at September 30, 2019	**$ 37,268**	**35,439,070**	**$ 354**	**23,094,221**	**$ 232**	**$ 175,990**	**$ (223,725)**	**$ (47,149)**

For the nine months ended September 30, 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	(14,697)	—	—	—	—	—	(6,820)	(6,820)
Cumulative effect of accounting change	—	—	—	—	—	—	213	213
Share-based compensation	—	—	—	—	—	2,345	—	2,345
Exchange of Class B Common Stock for Class A Common Stock	(151)	25,025	—	(25,025)	—	151	—	151
Issuance of Class A Common Stock to a related party under the Letter Agreements	—	6,042,503	61	—	—	14,939	—	15,000
Issuance of Letter Agreement and warrants to purchase Class A Common stock - related party	—	—	—	—	—	(500)	—	(500)
Vesting of restricted stock units	—	11,667	—	—	—	—	—	—
Change in redemption value of noncontrolling interest	(96,680)	—	—	—	—	—	96,680	96,680
Balances at September 30, 2018	**$ 19,912**	**15,772,449**	**$ 158**	**23,094,221**	**$ 232**	**$ 144,617**	**$ (188,985)**	**$ (43,978)**

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)

	Nine Months Ended September 30, 2019	2018
Cash flows from operating activities:		
Net loss before noncontrolling interest	$ (15,056)	$ (21,517)
Adjustments to reconcile net loss before noncontrolling interest to net cash used in operating activities:		
(Gain) loss on disposal of property and equipment, net	(312)	(12)
Depreciation expense	24	111
Share-based compensation expense	1,095	2,345
Change in fair value of warrants, related party	(1,050)	(610)
Amortization of debt discount	450	795
Changes in assets and liabilities:		
Accounts receivable	(8)	8,000
Prepaid expenses and other assets	659	(1,475)
Long-term deposits	(408)	2,256
Accounts payable and accrued expenses	(788)	(4,936)
Deferred revenue	(1,748)	(5,912)
Other liabilities	—	(32)
Net cash used in operating activities	(17,142)	(20,987)
Cash flows from investing activities:		
Proceeds from sale of assets	310	12
Purchases of property and equipment	—	(5)
Net cash provided by investing activities	310	7
Cash flows from financing activities:		
Proceeds from issuance of Class A Common Stock to a related party under the Letter Agreements	19,500	15,000
Proceeds from issuance of Class A Common Stock, net of offering costs	5,443	—
Proceeds from debt issuance	500	500
Repayment of notes payable	(7,858)	(2,674)
Net cash provided by financing activities	17,585	12,826
Net increase (decrease) in cash, cash equivalents and restricted cash and cash equivalents	753	(8,154)
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	$ 4,936	$ 6,266
Non-cash activities:		
Change in redemption value of noncontrolling interest	$ (18,803)	$ (96,680)
Exchange of vTv Therapeutics Inc. Class B Common Stock and vTv Therapeutics, LLC member units for vTv Therapeutics Inc. Class A Common Stock	$ —	$ 151
Issuance of Letter Agreements and warrants to purchase vTv Therapeutics Inc. Class A Common Stock to a related party	$ 492	$ 500

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 September 30, 2019, various holders own non-voting interests in vTv LLC, representing a 39.5% economic interest in vTv LLC, effectively restricting vTv Therapeutics Inc.'s interest to 60.5% 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, March 18, 2019, and September 26, 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 September 30, 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 September 30, 2019, the Company had an accumulated deficit of $223.7 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.

In September 2019, the Company entered into another Letter Agreement with MacAndrews and Forbes Group LLC (the "September 2019 Letter Agreement") under which it may sell, at the Company's option, up to 6,849,315 shares of its Class A Common Stock at a fixed price of $1.46 per share for aggregate proceeds of $10.0 million during a one-year period after the date of the September 2019 Letter Agreement. The September 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 one-year period after the date of the September 2019 Letter Agreement. In consideration for entering into the September 2019 Letter Agreement, the Company issued to MacAndrews and Forbes Group LLC warrants to purchase 400,990 shares of its Class A Common Stock at a price of $1.68 per share.

As of September 30, 2019, the Company's liquidity sources included cash and cash equivalents of $2.4 million and $8.0 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 fourth 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 has completed enrollment in a Phase 2 clinical trial of *TTP399* in patients with type 1 diabetes and continues to enroll patients in a Phase 2 trial to evaluate *azeliragon* as a potential treatment of mild-AD in patients with type 2 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 September 30, 2019, Condensed Consolidated Statements of Operations for the three and nine months ended September 30, 2019 and 2018, Condensed Consolidated Statement of Changes in Redeemable Noncontrolling Interest and Stockholders' Deficit for the three and nine months ended September 30, 2019 and 2018 and Condensed Consolidated Statements of Cash Flows for the nine months ended September 30, 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 September 30, 2019, the results of operations for the three and nine months ended September 30, 2019 and 2018 and cash flows for the nine months ended September 30, 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 and nine months ended September 30, 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.

One and three customers represented 100% of the revenue earned during the three months ended September 30, 2019 and 2018, respectively. Three customers represented 100% of the revenue earned during each of the nine months ended September 30, 2019 and 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 September 30, 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 September 30, 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):

	September 30, 2019	December 31, 2018
Cash and cash equivalents	$ 2,436	$ 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	$ 4,936	$ 4,183

Investments

In connection with the license agreement with Reneo Pharmaceuticals, Inc. ("Reneo") (the "Reneo License Agreement"), the Company received common stock 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 September 30, 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 and nine months ended September 30, 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. Balances recognized related to 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. The Company also elected a practical expedient to not separate its lease and non-lease components and instead account for them as a single lease component.

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, regulatory and compliance costs, fees paid to consultants and other entities that conduct certain research and development activities on the Company's behalf, facilities costs and overhead costs. 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 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 was recognized on a straight-line basis over the technology transfer service period.

The revenue related to this performance obligation has been fully recognized as of September 30, 2019. No revenue related to this performance obligation was recognized for the three months ended September 30, 2019. For the three months ended September 30, 2018, the Company recognized revenue related to this performance obligation of $0.9 million. For the nine months ended September 30, 2019 and 2018 the Company has recognized revenue of $1.7 million and $2.7 million, respectively related to this performance obligation. There have been no adjustments to the transaction price for this performance obligation during the three and nine months ended September 30, 2019 and 2018.

Huadong License Agreement

The Company is party to a License Agreement with Hangzhou Zhongmei Huadong Pharmaceutical Co., Ltd. ("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 (the "JDC"), 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

September 30, 2019. No revenue related to this combined performance obligation was recognized during the three and nine months ended September 30, 2019. For the three and nine months ended September 30, 2018, $1.2 million and $3.5 million of revenue was recognized related to this combined performance obligation, respectively.

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 September 30, 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 September 30, 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 September 30, 2019 was $0.1 million. An immaterial amount of revenue for this performance obligation has been recognized during the three and nine months ended September 30, 2019 and 2018.

There have been no adjustments to the transaction price for the performance obligations under the Huadong License Agreement during the three months ended September 30, 2019 and 2018.

Newsoara License Agreement

The Company is party to a license agreement with Newsoara 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 September 30, 2019. The Company recognized revenue related to this performance obligation of $1.0 million for the nine months ended September 30, 2019 and recognized revenue of $1.3 million and $1.7 million for the three and nine months ended September 30, 2018, respectively. During the nine months ended September 30, 2019, the transaction price for this performance obligation was increased by $1.0 million due to the satisfaction of a development milestone under the license agreement. This amount was fully recognized as revenue during the nine months ended September 30, 2019, as the related performance obligation has been fully satisfied.

JDRF Agreement

In August 2017, the Company entered into a research and collaboration agreement with JDRF International (the "JDRF Agreement") to support the funding of the Simplici-T1 Study, a Phase 2 study to explore the effects of *TTP399* in patients with type 1 diabetes. The Company has completed the Sentinel and Part 1 portions of this study and has completed enrollment of patients in the Part 2 portion of the study. 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 September 30, 2019, the Company had received funding under this agreement of $2.4 million. Research and development costs have been offset by a total of $2.4 million over the course of this agreement.

Contract Liabilities

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

	September 30, 2019	December 31, 2018
Current portion of deferred revenue	$ 31	$ 1,752
Deferred revenue, net of current portion	1,040	1,067
Total contract liabilities	$ 1,071	$ 2,819

The change in the Company's contract liabilities for the nine months ended September 30, 2019 of $1.7 million was due to the recognition of amounts included in the contract liability at the beginning of the period. The Company also recognized an additional $1.0 million of revenue related to changes in the estimated transaction prices for one of its customer contracts during the nine months ended September 30, 2019 for which the related performance obligation had already been satisfied.

Note 4: Share-Based Compensation

During the three and nine months ended September 30, 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 September 30, 2019, the Company had total unrecognized stock-based compensation expense for its outstanding stock option awards of approximately $1.9 million, which is expected to be recognized over a weighted average period of 2.0 years. The weighted average grant date fair value of option grants during the nine months ended September 30, 2019 and 2018 was $1.93 and $2.28 per option, respectively. The aggregate intrinsic value of the in-the-money awards outstanding at September 30, 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 Nine Months Ended September 30,	
	2019	2018
Expected volatility	115.29% - 117.94%	71.15% - 99.23%
Expected life of option, in years	5.8 - 6.0	5.7 - 6.0
Risk-free interest rate	1.58% - 2.64%	2.69% - 2.84%
Expected dividend yield	0.00%	0.00%

The following table summarizes the activity related to the stock option awards for the nine months ended September 30, 2019:

	Number of Shares	Weighted-Average Exercise Price
Awards outstanding at December 31, 2018	1,767,503	$ 8.57
Granted	998,000	2.26
Forfeited	(269,360)	6.71
Awards outstanding at September 30, 2019	2,496,143	$ 6.25
Options exercisable at September 30, 2019	1,266,869	$ 9.47
Weighted average remaining contractual term	6.5 Years	
Options vested and expected to vest at September 30, 2019	2,454,065	$ 6.31
Weighted average remaining contractual term	7.8 Years	

The following table summarizes the activity related to the RSU awards for the nine months ended September 30, 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 September 30, 2019	11,667	$ 5.81
RSUs expected to vest at September 30, 2019	11,564	$ 5.81

As of September 30, 2019, the total unrecognized stock-based compensation expense and the aggregate intrinsic value related to the Company's outstanding RSU awards were both 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 September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Research and development	$ 154	$ 247	$ 369	$ 871
General and administrative	259	332	726	1,474
Total share-based compensation expense	$ 413	$ 579	$ 1,095	$ 2,345

Note 5: Notes Payable

Notes payable consist of the following (in thousands):

	September 30, 2019	December 31, 2018
Notes payable under the Loan Agreement	$ 7,397	$ 14,897
Short-term financing	358	216
Accreted final payment	1,050	600
Total notes payable	8,805	15,713
Less: Current portion	(7,442)	(9,383)
Total notes payable, net of current portion	$ 1,363	$ 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 September 30, 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*. This agreement was amended in May 2019 to create milestone payments applicable to certain specific and non-specific areas of therapeutic use. 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%.

Future scheduled maturities of operating lease liabilities to occur in 2019 as of September 30, 2019 and December 31, 2018 were $0.1 million and $0.4 million, respectively. There are no material future scheduled maturities of operating lease liabilities in the year 2020 or thereafter. Note that such amounts do not include payments for the lease that has not commenced discussed below.

In August 2019, the Company entered into a lease agreement for new office space for its headquarters location. This lease is expected to commence in the fourth quarter of 2019 after the completion of certain tenant improvements being made by the lessor. The related lease liability and right-of-use asset will be recognized by the Company in its Condensed Consolidated Financial Statements upon commencement. The future undiscounted lease payments to be made in connection with this lease are as follows (in thousands):

2019	$	—
2020		242
2021		248
2022		254
2023		261
Thereafter		267
Total	$	1,272

Operating lease cost recognized for the three and nine months ended September 30, 2019 and 2018 was $0.1 million for each of the three-month periods and $0.3 million for each of the nine-month periods.

Note 8: Redeemable Noncontrolling Interest

The Company is subject to the Exchange Agreement with respect to the vTv Units representing the 39.5% noncontrolling interest in vTv LLC outstanding as of September 30, 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 September 30, 2019 and December 31, 2018, the redeemable noncontrolling interest was recorded based on the redemption value as of the balance sheet date of $37.3 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 September 30,		For the Nine Months Ended September 30,	
	2019	2018	2019	2018
Net loss attributable to vTv Therapeutics Inc. common shareholders	$ (4,115)	$ (796)	$ (12,880)	$ (6,820)
Increase in vTv Therapeutics Inc. accumulated deficit for purchase of LLC Units as a result of common stock issuances	(4,515)	(9,552)	(14,408)	(13,869)
Change from net loss attributable to vTv Therapeutics Inc. common shareholders and transfers to noncontrolling interest	$ (8,630)	$ (10,348)	$ (27,288)	$ (20,689)

Note 9: Related-Party Transactions

MacAndrews & Forbes Incorporated

As of September 30, 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 24,876,760 shares of the Company's Class A Common Stock. As a result, MacAndrews' holdings represent approximately 81.9% 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	September 26, 2019 Letter Agreement
Aggregate dollar value to be sold under agreement	$10.0 million	$10.0 million	$10.0 million	$9.0 million	$10.0 million
Specified purchase price per share	$ 4.38	$ 1.33	$ 1.84	$ 1.65	$ 1.46
Expiration date of letter agreement	December 5, 2018	July 30, 2019	December 11, 2019	March 18, 2020	September 26, 2020
Shares available to be issued under related warrants	198,267	518,654	340,534	—	400,990
Exercise price of related warrants	$ 5.04	$ 1.53	$ 2.12	$ —	$ 1.68
Expiration date of related warrants	December 5, 2024	July 30, 2025	December 11, 2025		September 26, 2026
Total shares issued as of September 30, 2019	2,283,105	7,518,797	5,434,783	5,454,546	1,369,863
Remaining shares to be issued as of September 30, 2019	—	—	—	—	5,479,453

The March 18, 2019 and September 26, 2019 Letter Agreements resulted in deemed distributions to MacAndrews of $3.7 million and $0.5 million, respectively. These deemed distributions were the result of the fair value of the financial instruments issued to MacAndrews exceeding the fair value of the financial instrument received by the Company. These deemed distributions have been reflected as increases to the net loss attributable to common shareholders of vTv Therapeutics Inc. for computing net loss per share.

The Letter Agreement Warrants related to the September 26, 2019 Letter Agreement were recorded as warrant liability, related party within the Company's Condensed Consolidated Balance Sheets based on their fair value. The issuance of the Letter Agreement Warrants was considered to be a cost of equity recorded as a reduction to additional paid-in capital.

Fair value of the Letter Agreement Warrants issued during the three and nine months ended September 30, 2019 and 2018 was calculated as of their issuance date using the methods described in Note 13 using the following assumptions:

	July 30, 2018	September 26, 2019
Expected volatility	95.29%	110.35%
Expected life of option, in years	7.0	7.0
Risk-free interest rate	2.94%	1.65%
Expected dividend yield	0.00%	0.00%

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 September 30, 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 September 30, 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 recorded an income tax provision of $0.1 million for the nine months ended September 30, 2019 and $0.2 million for the nine months ended September 30, 2018. These amounts relate to the foreign withholding taxes paid in connection with payments recognized under the Newsoara License Agreement.

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 September 30, 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 September 30, 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 September 30,		For the Nine Months Ended September 30,	
	2019	2018	2019	2018
Numerator:				
Net loss	$ (5,960)	$ (1,961)	$ (15,056)	$ (21,517)
Less: Net loss attributable to noncontrolling interests	(2,352)	(1,165)	(6,411)	(14,697)
Net loss attributable to vTv Therapeutics Inc.	(3,608)	(796)	(8,645)	(6,820)
Less: Deemed distribution to related party (Note 9)	(507)	—	(4,235)	—
Net loss attributable to common shareholders of vTv Therapeutics Inc., basic and diluted	(4,115)	(796)	(12,880)	(6,820)
Denominator:				
Weighted-average vTv Therapeutics Inc. Class A Common Stock, basic and diluted	32,126,130	12,305,949	27,709,486	10,701,599
Net loss per share of vTv Therapeutics Inc. Class A Common Stock, basic and diluted	$ (0.13)	$ (0.06)	$ (0.46)	$ (0.64)

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

	September 30, 2019	September 30, 2018
Class B Common Stock (1)	23,094,221	23,094,221
Common stock options granted under the Plan	2,496,143	1,782,688
Restricted stock units	11,667	23,333
Common stock options granted under Letter Agreements	5,479,453	3,759,399
Common stock warrants	1,649,031	907,507
Total	32,730,515	29,567,148

(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 allowed 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 completed these restructuring activities in the second quarter of 2019.

During the nine months ended September 30, 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.

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 and nine months ended September 30, 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 September 30, 2019 and December 31, 2018 (in thousands):

	Balance at September 30, 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)	$ 1,878	$ —	$ —	$ 1,878
Total	$ 1,878	$ —	$ —	$ 1,878

	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 nine months ended September 30,				
	Balance at January 1	Net Change in fair value included in earnings	Purchases / Issuance	Sales / Repurchases	Balance at September 30,
2019					
Warrant liability, related party	$ 2,436	$ (1,050)	$ 492	$ —	$ 1,878
Total	$ 2,436	$ (1,050)	$ 492	$ —	$ 1,878
2018					
Warrant liability, related party	$ 492	$ (610)	$ 500	$ —	$ 382
Total	$ 492	$ (610)	$ 500	$ —	$ 382

During the three and nine months ended September 30, 2019 and 2018, the Company recognized a loss of $0.1 million and a gain of $0.3 million for the three-month periods, respectively related to the change in fair value of the Letter Agreement Warrants. For the nine-month periods, the Company recognized gains of $1.1 million and $0.6 million, respectively. These amounts were recognized as a component of other (expense) income – related party in the Condensed Consolidated Statements of Operations. Significant inputs utilized in the valuation of the Letter Agreement Warrants as of September 30, 2019 were:

	September 30, 2019	December 31, 2018
Expected volatility	110.41% - 120.54%	108.53% - 115.04%
Risk-free interest rate	1.56% - 1.66%	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.

Note 14:Subsequent Events

On October 24, 2019, the Company caused MacAndrews to purchase an additional 1,369,863 shares of its Class A Common Stock under the terms of the September 2019 Letter Agreement for $2.0 million in cash.

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 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 type 1 diabetes (*TTP399*) and for Alzheimer's disease ("AD") (*azeliragon*). We are currently investigating *TTP399*, an oral glucokinase activator, as a treatment for type 1 diabetes in a Phase 2 study in partnership with JDRF International ("JDRF"). We are investigating *azeliragon* (*TTP488*), an oral antagonist of the receptor for advanced glycation endproducts ("RAGE"), as a treatment of mild-AD in patients with type 2 diabetes in a Phase 2 study. Finally, we are advancing the non-clinical development of our NRF2 pathway program via research agreements with academic and industry collaborators.

In addition to our internal development programs, we are furthering the clinical development of three other programs, a small molecule GLP-1r agonist, a PDE4 inhibitor, and a PPAR-delta agonist, through partnerships with pharmaceutical partners via licensing arrangements.

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

Our Diabetes Programs – Glucokinase Activator

In June 2019, we announced positive results from the primary analysis of Part 1 of the Phase 2 Simplici-T1 trial assessing *TTP399* in adult patients with type 1 diabetes ("T1D").

In this double-blind, placebo-controlled 12-week trial, the baseline mean HbA1c for the groups treated with *TTP399* and placebo was 7.3% and 7.4%, respectively. Patients treated with TTP399 (n=8) showed a statistically significant mean reduction in HbA1c of 0.6% at 12 weeks, while the group treated with placebo (n=11) showed a mean increase in HbA1c of 0.1%, resulting in a mean HbA1c reduction of 0.7% in the *TTP399* group relative to the placebo group (p=0.03).

TTP399 was well tolerated with similar incidences of treatment-emergent adverse events overall and by system organ class. The study had no serious adverse event reported. The study also had no report of diabetic ketoacidosis or severe hypoglycemia.

In September 2019, we presented positive continuous glucose monitor (CGM) and insulin dose data from the patients with complete CGM profiles from part 1 of the Simplici-T1 Study at the 55th Annual Meeting of the European Association for the Study of Diabetes. Key results from this presentation included:

- TTP399 treatment (n=6) increased Time in Range from baseline to end of treatment by 11% (2.7 hours) (p=0.055) per day (24 hours), and by 12% (1.7 hours) (p=0.04) during the critical waking hours (7am-9pm) relative to placebo (n=9).
- TTP399 treatment reduced the total daily mealtime bolus insulin dose by 23% compared to 4% for placebo while significantly improving glycemic control.
- Patients in the treatment group experienced fewer Level 1 (≥54-70 mg/dl) and Level 2 (<54 mg/dl) hypoglycemic events than patients in the placebo group.

We have completed enrollment in Part 2 of the Phase 2 Simplici-T1 trial and expect to report topline results from this portion of the study in the first quarter of 2020.

Our Alzheimer's Program – *Azeliragon*

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

In June 2019, we began screening patients 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 "Elevage Study" or "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 report top-line results from the Phase 2 study in late 2020 or early 2021. 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 function. 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 September 30, 2019, we have incurred approximately $575.6 million in research and development expenses.

Our research and development expenses by project for the three and nine months ended September 30, 2019 and 2018 were as follows (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Direct research and development expense:				
Azeliragon	$ 1,875	$ 720	$ 5,032	$ 12,996
TTP399	545	66	1,675	587
Other projects	156	109	490	485
Indirect research and development expense	1,087	1,803	3,516	6,167
Total research and development expense	$ 3,663	$ 2,698	$ 10,713	$ 20,235

We expect our research and development expenses to increase as we further development of *TTP399* as a potential treatment of type 1 diabetes and continue the enrollment of the Phase 2 portion of the Elevage Study, subject to the availability of additional funding. To the extent we initiate further development of these and 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 September 30, 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 September 30, 2019	2018	Change
Revenue	$ 8	$ 3,375	$ (3,367)
Operating expenses:			
Research and development	3,663	2,698	965
General and administrative	1,770	2,158	(388)
Total operating expenses	5,433	4,856	577
Operating loss	(5,425)	(1,481)	(3,944)
Interest income	15	13	2
Interest expense	(404)	(822)	418
Other (expense) income, net	(146)	329	(475)
Loss before income taxes	(5,960)	(1,961)	(3,999)
Income tax provision	—	—	—
Net loss before noncontrolling interest	(5,960)	(1,961)	(3,999)
Less: net loss attributable to noncontrolling interest	(2,352)	(1,165)	(1,187)
Net loss attributable to vTv Therapeutics Inc.	$ (3,608)	$ (796)	$ (2,812)

Revenue

Revenue was insignificant for the three months ended September 30, 2019 and $3.4 million for the three months ended September 30, 2018. During each of these periods, our revenue was related to the recognition of amounts realized from license performance obligations. For the three months ended September 30, 2018, the revenue recognized related to the amortization of amounts deferred at the initiation of our license agreements which were related to the transfer of technology performance obligations. The revenue was recognized over the transfer service period for the associated license agreements, all of which ended prior to the third quarter of 2019.

Research and Development Expenses

Research and development expenses were $3.7 million and $2.7 million for the three months ended September 30, 2019 and 2018, respectively. The increase in research and development expenses during the period of $1.0 million, or 35.8%, was primarily due to an increase in clinical trial costs of $1.2 million for *azeliragon* which was mainly driven by startup of the Elevage Study. Additionally, we saw a reduction in personnel costs of approximately $1.0 million driven primarily by the corporate restructuring announced in December 2018.

General and Administrative Expenses

General and administrative expenses were $1.8 million and $2.2 million for the three months ended September 30, 2019 and 2018, respectively. The decrease in general and administrative expenses was driven primarily by the gain recognized on the sale of fully depreciated or impaired laboratory equipment during the period.

Interest Expense

Interest expense was $0.4 million and $0.8 million for the three months ended September 30, 2019 and 2018, respectively. The decrease in interest expense was driven by lower principal balances outstanding during the third quarter of 2019 because of payments made in accordance with the terms of our Loan Agreement. 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%.

Comparison of the nine months ended September 30, 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:	Nine Months Ended September 30, 2019	 2018	 Change
Revenue	$ 2,757	$ 7,912	$ (5,155)
Operating expenses:			
Research and development	10,713	20,235	(9,522)
General and administrative	6,548	7,150	(602)
Total operating expenses	17,261	27,385	(10,124)
Operating loss	(14,504)	(19,473)	4,969
Interest income	41	47	(6)
Interest expense	(1,544)	(2,547)	1,003
Other income, net	1,051	656	395
Loss before income taxes	(14,956)	(21,317)	6,361
Income tax provision	100	200	(100)
Net loss before noncontrolling interest	(15,056)	(21,517)	6,461
Less: net loss attributable to noncontrolling interest	(6,411)	(14,697)	8,286
Net loss attributable to vTv Therapeutics Inc.	$ (8,645)	$ (6,820)	$ (1,825)

Revenue

Revenue was $2.8 million for the nine months ended September 30, 2019 and $7.9 million for the nine months ended September 30, 2018. During each of these periods, our revenue was related to the recognition of amounts realized from license performance obligations and primarily related to the amortization of amounts deferred at the initiation of our license agreements which were related to the transfer of technology performance obligations. The technology service periods for our license agreements with Newsoara Biopharma Co., Ltd. (“Newsoara”) and Hangzhou Zhongmei Huadong Pharmaceutical Co., Ltd were completed in 2018. The technology service period for our license agreement with Reneo Pharmaceuticals, Inc. (“Reneo”) ended in the second quarter of 2019. During the 2019 period, we also recognized an additional $1.0 million related to the satisfaction of a milestone within our license agreement with Newsoara.

Research and Development Expenses

Research and development expenses were $10.7 million and $20.2 million for the nine months ended September 30, 2019 and 2018, respectively. The decrease in research and development expenses during the period of $9.5 million, or 47.1%, was primarily due to a decrease in clinical trial costs of $8.0 million for *azeliragon* which was mainly driven by the termination of our STEADFAST and open-label extension (“OLE”) studies in early April 2018. This decrease was offset, in part, by an increase in expenses for the Elevage Study as it began to screen and enroll patients in mid-2019. Additionally, personnel and related overhead costs decreased approximately $2.2 million primarily driven by the corporate restructuring announced in December 2018. Such decreases were offset by increases of $1.1 million related to the Simplici-T1 Study. Part 1 of this study completed in early 2019 and start up and enrollment of the larger Part 2 of this study occurred in the second and third quarters of 2019.

General and Administrative Expenses

General and administrative expenses were $6.5 million and $7.2 million for the nine months ended September 30, 2019 and 2018, respectively. The decrease in general and administrative expenses during the period of $0.6 million, or 8.4%, was driven by gains recognized upon the sale of laboratory equipment in the third quarter of 2019 as well as decreased professional fees.

Interest Expense

Interest expense was $1.5 million and $2.5 million for the nine months ended September 30, 2019 and 2018, respectively. The decrease in interest expense was driven by lower principal balances outstanding during the first nine months of 2019 because of

payments made in accordance with the terms of our Loan Agreement. 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 September 30, 2019, we have an accumulated deficit of $223.7 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 September 30, 2019, our liquidity sources included cash and cash equivalents of $2.4 million and $8.0 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 fourth quarter of fiscal 2019. These factors raise substantial doubt regarding our ability to continue as a going concern.

We are currently enrolling patients in the Elevage Study and have completed enrollment in Part 2 of the Phase 2 clinical trial of *TTP399* in patients with type 1 diabetes. In order to complete these trials and continue the Company's 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 the Letter Agreements, we have the right to sell to MacAndrews shares of 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.

In September 2019, the Company entered into another Letter Agreement with MacAndrews and Forbes Group LLC (the "September 2019 Letter Agreement") under which it may sell, at the Company's option, up to 6,849,315 shares of its Class A Common Stock at a fixed price of $1.46 per share for aggregate proceeds of $10.0 million during a one-year period after the date of the September 2019 Letter Agreement. The September 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 one-year period after the date of the September 2019 Letter Agreement. In consideration for entering into the September 2019 Letter Agreement, the Company issued to MacAndrews and Forbes Group LLC warrants to purchase 400,990 shares of its Class A Common Stock at a price of $1.68 per share.

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	September 26, 2019 Letter Agreement
Aggregate dollar value to be sold under agreement	$10.0 million	$10.0 million	$10.0 million	$9.0 million	$10.0 million
Specified purchase price per share	$ 4.38	$ 1.33	$ 1.84	$ 1.65	$ 1.46
Expiration date of letter agreement	December 5, 2018	July 30, 2019	December 11, 2019	March 18, 2020	September 26, 2020
Shares available to be issued under related warrants	198,267	518,654	340,534	—	400,990
Exercise price of related warrants	$ 5.04	$ 1.53	$ 2.12	$ —	$ 1.68
Expiration date of related warrants	December 5, 2024	July 30, 2025	December 11, 2025		September 26, 2026
Total shares issued as of September 30, 2019	2,283,105	7,518,797	5,434,783	5,454,546	1,369,863
Remaining shares to be issued as of September 30, 2019	—	—	—	—	5,479,453

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

	Nine Months Ended September 30,	
	2019	2018
(dollars in thousands)		
Net cash used in operating activities	$ (17,142)	$ (20,987)
Net cash provided by investing activities	310	7
Net cash provided by financing activities	17,585	12,826
Net increase (decrease) in cash and cash equivalents	$ 753	$ (8,154)

Operating Activities

For the nine months ended September 30, 2019, our net cash used in operating activities decreased $3.9 million from the nine months ended September 30, 2018. This decrease was driven by the lower spending for the nine months ended September 30, 2019 which was primarily driven by the cessation of the STEADFAST and related OLE studies in April 2018.

Investing Activities

For the nine months ended September 30, 2019, net cash provided by investing activities was $0.3 million which related to proceeds received from the sale of certain laboratory equipment. For the nine months ended September 30, 2018, net cash provided by investing activities was insignificant.

Financing Activities

For the nine months ended September 30, 2019, net cash provided by financing activities increased by $4.8 million from the nine months ended September 30, 2018, driven by increases in funding received from sales of Class A Common Stock pursuant to the Letter Agreements and through a registered direct offering in 2019. Such increases in funding were offset by higher uses of cash to repay the principal portion of our outstanding notes payable in 2019 pursuant to the payment terms of the Loan Agreement.

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 fourth quarter of 2019. We have begun enrolling patients for the Elevage Study and are continuing to conduct Part 2 of the Phase 2 clinical trial of *TTP399* in patients with type 1 diabetes. In order to complete these trials and continue our 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 the Simplici-T1 Study and the Elevage 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 September 2019 Letter Agreement. 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 September 30, 2019, provide us the right to sell to MacAndrews an additional 5,479,453 shares of our Class A Common Stock at a price of $1.46 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 price. As of September 30, 2019, we had received funding of $41.0 million under the Letter Agreements and, in exchange, had issued a total of 22,061,094 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 September 30, 2019. Based upon that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that, as of September 30, 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 September 30, 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
10.1	Letter Agreement, dated as of September 26, 2019, by and between MacAndrews & Forbes Group LLC and vTv Therapeutics Inc.
10.2	Form of Securities Purchase Agreement to Purchase Class A Common Stock, by and between MacAndrews & Forbes Group LLC and vTv Therapeutics Inc.
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: October 30, 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 10.1

MacAndrews & Forbes Group LLC
35 East 62nd Street
New York, New York 10065

September 26, 2019

vTv Therapeutics Inc.
4170 Mendenhall Oaks Pkwy
High Point, NC 27265

Attn: Stephen L. Holcombe
President and Chief Executive Officer

Rudy C. Howard
Chief Financial Officer

Gentlemen:

You have indicated an interest in an additional investment by MacAndrews & Forbes Group LLC or one of its affiliates (collectively, "MacAndrews") in Class A common stock, par value $0.01 ("Common Stock"), of vTv Therapeutics Inc. (the "Company") in an amount of up to $10,000,000. I am pleased to present, for your board's consideration, the terms on which we would agree to make such an additional investment.

As set forth in more detail in the term sheet attached to this letter (collectively, the term sheet and this letter are referred to as this "Letter") we agree to invest up to $10,000,000 in the Company, with such commitment remaining available to the Company, at its option, for a period of one year from the date of this Letter (the "Commitment Period"). In exchange, the definitive agreement will provide that the Company will issue to us on each funding date (the "Company Option") Common Stock at a per share purchase price equal to $1.46 (the "Per Share Price"), which is equal to the closing price of the Common Stock for the trading day prior to the date of this Letter.

In consideration for our binding commitment, upon the execution of this Letter, the Company will issue us warrants to acquire 400,990 shares of Common Stock, exercisable at an initial exercise price of $1.68 per share of Common Stock, subject to customary proportional adjustments for stock splits, stock dividends, combinations and similar transactions. The warrants shall be exercisable for a period of seven years commencing on the date of this Letter. We shall also have the option, during the Commitment Period, to invest in the Company by purchasing up to $10,000,000 of shares of Common Stock at the Per Share Price (the "MacAndrews Option"). Notwithstanding anything to the contrary in this Letter, the total value of Common Stock that may be purchased pursuant to the Company Option and the MacAndrews Option shall not exceed $10,000,000 in the aggregate. The Company Option may be exercised by you, and the MacAndrews Option may be exercised by us, in each case, by the exercising party delivering a notice (a "Funding Notice") to the other party, which notice shall specify the aggregate value and number of shares of Common Stock to be purchased by us. Funding Notices from the Company shall be made in writing by the Chief Executive Officer or Chief Financial Officer of the Company. MacAndrews shall be limited to three Funding Notices during the Commitment Period; the number of Funding Notices from the Company shall not be limited.

The Company would use the proceeds of any such investment to fund research and development, to pursue growth opportunities and for general corporate purposes.

Our obligation to fund the purchase price and the Company's obligation to issue shares of Common Stock on the terms set forth in this Letter with respect to each investment contemplated by this Letter are subject to the negotiation and execution of a mutually acceptable securities purchase agreement with respect to each such investment.

This Letter shall, upon execution, be binding on the parties hereto. All obligations under this Letter shall remain in full force and effect until the one-year anniversary of this Letter. The completion of the transactions contemplated by this Letter are subject, among other things, to the negotiation and execution of a definitive agreement acceptable to each of us. The parties hereto agree that, upon delivery of a Funding Notice in accordance with the terms of this Letter by either party, the parties shall, as promptly as practicable, (i) enter into a securities purchase agreement with respect to the investment contemplated by the

Funding Notice, (ii) take all actions and further steps as may be reasonably necessary to complete such investment, and (iii) complete such investment. Notwithstanding anything to the contrary in this Letter, failure by either party to comply with the foregoing sentence shall constitute a material breach under this Letter, entitling the non-breaching party to specific performance (it being understood that money damages would not be an adequate remedy for any such breach).

Neither this Letter nor any of the provisions hereof may be amended, modified, changed or waived except by an instrument in writing signed by the parties hereto. This Letter shall be governed by and construed in accordance with the laws of the State of New York. This Letter contains the full and entire understanding and agreement between the parties with regard to the subject matters hereof and supersedes all prior understandings and agreements relating to the matters set forth herein. This Letter may be executed in counterparts, each of which shall be deemed to constitute an original but all of which together shall constitute one and the same instrument.

We continue to be excited about the Company and its prospects. We look forward to implementing a transaction that would be in the best interests of the Company’s stockholders, officers and other employees, and customers.

Very truly yours,

MACANDREWS & FORBES GROUP LLC

By: /s/ Shiri Ben-Yishai
Name: Shiri Ben-Yishai
Title: Corporate Secretary

AGREED AND ACCEPTED:

VTV THERAPEUTICS INC.

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

SUMMARY OF TERMS
$10,000,000 INVESTMENT
VTV THERAPEUTICS INC.
September 26, 2019

This term sheet ("Term Sheet") summarizes the principal terms of an investment by MacAndrews & Forbes Group LLC or one of its affiliates (collectively, "MacAndrews") of up to $10,000,000 in vTv Therapeutics Inc. (the "Company").

Company Option:	MacAndrews commits to invest up to an aggregate of $10,000,000 in the Company, at the Company's option (the "Company Option"), during the one-year period (the "Commitment Period") following execution of this Letter.
MacAndrews Option:	At any time during the Commitment Period, MacAndrews may, at MacAndrews' option (the "MacAndrews Option"), elect to invest up to $10,000,000 in the Company on the same terms as the Company Option; provided that in no event will the aggregate amount of the investments pursuant to the Company Option and the MacAndrews Option exceed $10,000,000.
Securities to be Issued; Terms of Investments:	Pursuant to the exercise of the Company Option or the MacAndrews Option (an "Investment"), subject to the terms and conditions of the Purchase Agreement (defined below), the Company will issue to Investor on each funding date: Such number of shares (the "Shares") of Class A common stock, par value $0.01 per share ("Common Stock"), of the Company with a value equal to the Investment, at a per share price ("Per Share Price") equal to $1.46, which is equal to the closing price of the Common Stock on the day prior to the date of this Letter.
Use of Proceeds:	To fund research and development, to pursue growth opportunities and for general corporate purposes.
Commitment Fee:	As consideration for the investment commitment and the other covenants and obligations of MacAndrews under this Letter, upon the execution of this Letter, the Company will issue to MacAndrews warrants (the "Commitment Fee Warrants") to purchase 400,990 shares of Common Stock, at an exercise price per share of $1.68, payable in cash or by cashless exercise. The Commitment Fee Warrants shall be exercisable for seven years commencing on the date of execution of this Letter. The Commitment Fee Warrants do not reduce the total amount to be invested under the Company Option and the MacAndrews Option.
Funding Notices; Binding Commitment:	The Company Option may be exercised by the Company, and the MacAndrews Option may be exercised by MacAndrews, in each case, by the exercising party delivering a written notice (a "Funding Notice") to the other party, which notice shall specify the aggregate value and number of shares of Common Stock to be purchased by MacAndrews. Funding Notices from the Company shall be made in writing by the Chief Executive Officer or Chief Financial Officer of the Company. MacAndrews shall be limited to three Funding Notices during the Commitment Period; the number of Funding Notices from the Company shall not be limited. Upon delivery of a Funding Notice in accordance with the terms of this Letter by either party, the parties shall, as promptly as practicable, (i) enter into a securities purchase agreement with respect to the Investment contemplated by the Funding Notice, (ii) take all actions and further steps as may be reasonably necessary to complete such Investment, and (ii) complete such Investment. Notwithstanding anything to the contrary in this Letter, failure by either party to comply with the foregoing sentence shall constitute a material breach of this Letter, entitling the non-breaching party to specific performance (it being understood that money damages would not be an adequate remedy for any such breach).

Securities Purchase Agreement:	MacAndrews' obligation to fund the purchase price and the Company's obligation to issue shares of Common Stock on the terms set forth in this Letter with respect to each Investment contemplated by this Letter are subject to the negotiation and execution of a mutually acceptable securities purchase agreement (the "Purchase Agreement") with respect to each such Investment. The issuance of the Shares will be made pursuant to Regulation D under the Securities Act of 1933, as amended, and MacAndrews agrees that it is an "accredited investor" (as such term is defined in Rule 501 of Regulation D promulgated under the Securities Act of 1933, as amended).
Expenses:	Counsel to the Company will prepare initial drafts of all documents. The Company shall pay all reasonable fees and expenses of MacAndrews' counsel, if necessary.
Registration Rights:	The Shares and shares of Common Stock issuable upon exercise of the Commitment Fee Warrants and any other securities acquired in connection with any Investment shall be covered by the Investor Rights Agreement by and between the Company and M&F TTP Holdings Two LLC, as successor in interest to vTv Therapeutics Holdings LLC, dated July 29, 2015, as amended from time to time.
Representations and Warranties:	Each Purchase Agreement will include standard representations and warranties by the Company.
Conditions to Closing:	Each Purchase Agreement will include standard conditions to closing of each tranche, including, without limitation, (i) the Company being in compliance with all applicable Nasdaq Marketplace Rules (both before and after giving effect to the applicable closing), except for non-compliance as previously disclosed by the Company (ii) the Common Stock remaining listed for trading on a Nasdaq exchange and (iii) the Shares to be then issued having been listed for trading on a Nasdaq exchange.

FORM OF

SECURITIES PURCHASE AGREEMENT

This SECURITIES PURCHASE AGREEMENT (this "Agreement"), is made and entered into as of [___], [2019][2020], by and between VTV THERAPEUTICS INC., a Delaware corporation (the "Company"), and MACANDREWS & FORBES GROUP LLC, a Delaware limited liability company (the "Purchaser").

RECITALS

WHEREAS, the Company and the Purchaser are parties to that certain Letter Agreement dated as of September 26, 2019 (the "September 2019 Letter Agreement");

WHEREAS, pursuant to the terms of the September 2019 Letter Agreement, the Purchaser provided an investment commitment to invest in the Company, at either party's option, up to $10,000,000, in exchange for Company Class A common stock, par value $0.01, currently listed on NASDAQ (the "Common Stock") at a per share price equal to $1.46;

WHEREAS, on [___] and pursuant to the terms of the September 2019 Letter Agreement, the Company notified the Purchaser that it intended to exercise its right to cause the Purchaser to invest $[___] in the Company, which amount represents [___] shares of Common Stock (the "Shares");

NOW, THEREFORE, in consideration of the premises and mutual covenants contained in this Agreement and other good and valuable consideration the receipt and sufficiency of which are hereby acknowledged, the Company and the Purchaser agree as follows:

1. **Purchase and Sale of Securities**.

   a. Purchase and Sale of Securities. Subject to the terms and conditions hereof, at the Closing (as herein defined), the Company shall issue and sell to the Purchaser, and the Purchaser shall purchase from the Company, the Shares at a purchase price per Share of $1.46 in cash, for an aggregate amount of $[___] (the "Purchase Price").

   b. Exemption. Based in part on the representations and warranties of the Purchaser set forth herein, the offer and sale of the Shares hereunder are being made in reliance upon the exemption from registration set forth in Regulation D promulgated under the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder (the "Securities Act").

2. **Closings and Deliverables**.

   a. Payment. At the Closing (as defined herein), the Purchaser will deliver the Purchase Price in cash to the Company via wire transfer in immediately available funds to the account designated below:

Account Name: [___]
Account Number: [___]
Routing Number: [___]
Bank Name: [___]

b. Closing. The closing of the purchase and sale of the Shares shall be deemed for all purposes to have taken place at 11:00 (EST) on the date hereof (the "Closing Date"), at the offices of the Company (the "Closing").

3. Representations and Warranties by the Company. The Company hereby represents and warrants to the Purchaser, as of the date hereof, as follows:

a. Incorporation and Qualification. The Company has been duly organized and is validly existing as a corporation and in good standing under the laws of the State of Delaware with the requisite corporate power and authority to own and use its properties and assets and to carry on its business as currently conducted in all material respects.

b. Authority. The Company has the requisite corporate power and authority to enter into this Agreement and to issue and deliver the Shares. The execution and delivery of this Agreement has been duly and validly authorized by all necessary corporate action by the Company. This Agreement has been duly and validly executed and delivered by and on behalf of the Company and constitutes a valid, legal and binding agreement, enforceable against the Company in accordance with its terms, except as enforceability may be limited by general equitable principles, bankruptcy, insolvency, fraudulent conveyance, reorganization, moratorium or other laws affecting creditors' rights generally and except as any indemnity in respect of securities law liabilities may be unenforceable.

c. Brokers and Finders. There is no investment banker, broker, finder or other intermediary which has been retained by or is authorized to act on behalf of the Company who might be entitled to any fee or commission from the Company, the Purchaser or any of their respective affiliates upon consummation of the transactions contemplated by this Agreement except as may be noted and disclosed to the Purchaser.

d. Nasdaq Compliance. The Company is, and immediately following the issuance of the Shares pursuant to this Agreement will be, in compliance with all applicable NASDAQ Marketplace Rules.

4. Representations and Warranties of the Purchaser. The Purchaser represents and warrants to the Company, as of the date hereof, as follows:

a. Power. The Purchaser has been duly organized, is validly existing and is in good standing under the laws of its state of incorporation, with all limited liability company power and authority to execute, deliver and perform its obligations under the Agreement.

b. Authority. The Purchaser has the requisite power and authority to enter into this Agreement. The execution and delivery of this Agreement and the acquiring of the Shares hereunder and the consummation of the transactions contemplated hereby have been duly and validly authorized by all necessary action by the Purchaser. This Agreement has been duly and validly executed and delivered by or on behalf of the Purchaser and constitutes a valid, legal and binding agreement, enforceable against the Purchaser in accordance with its terms, except as enforceability may be limited by general equitable principles, bankruptcy, insolvency, fraudulent conveyance, reorganization, moratorium or other laws affecting creditors' rights generally.

c. Investment in Securities. The Purchaser:

i. is knowledgeable, sophisticated and experienced in making, and is qualified to make, decisions with respect to investments in shares representing an investment decision like that involved in the acquiring of the Shares, including investments in securities issued by the Company and comparable entities, and has requested, received, reviewed and considered all information it deems relevant in making an informed decision to acquire the Shares;

ii. is acquiring the Shares in the ordinary course of its business and for its own account for investment only and with no present intention or view toward the public sale or distribution thereof, and no arrangement or understanding exists with any other persons regarding the public sale or distribution of any Shares; and

iii. will not, directly or indirectly, except in compliance with the Securities Act, the rules and regulations promulgated thereunder and such other securities or blue sky laws as may be applicable, offer, sell, pledge, transfer or otherwise dispose of (or solicit any offers to buy, purchase or otherwise acquire or take a pledge of) any of the Shares.

d. Exemptions. The Purchaser understands that the Shares are being issued to it in reliance upon a specific exemption from the registration requirements of Securities Act, the rules and regulations and state securities laws, and that the Company is relying upon the truth and accuracy of, and the Purchaser's

compliance with, the representations, warranties, agreements, acknowledgments and understandings of the Purchaser set forth herein in order to determine the availability of such exemption and the eligibility of the Purchaser to acquire the Shares. The Purchaser agrees that it is an "accredited investor" (as such term is defined in Rule 501 of Regulation D promulgated under the Securities Act).

e. Investment Risk. The Purchaser understands that its investment in the Shares involves a significant degree of risk and that the market price of the Common Stock has been and continues to be volatile, that no representation is being made as to the future value of the Common Stock and that the Purchaser has carefully read and considered the matters set forth in public filings made by the Company with the Securities and Exchange Commission ("SEC"). The Purchaser has the knowledge and experience in financial and business matters as to be capable of evaluating the merits and risks of an investment in the Shares and has the ability to bear the economic risks of an investment in the Shares. The Purchaser has had a reasonable opportunity to review the Company's public filings with the SEC, to ask questions of the Company and its representatives; and the Company has answered all inquiries that the Purchaser or the Purchaser's representatives have put to it, and all such inquiries have been answered to the full satisfaction of the Purchaser. The Purchaser acknowledges that certain representatives of the Purchaser are representatives of significant holders of the Company's outstanding equity securities and are directors of the Company, and, as a result, the Purchaser agrees and acknowledges that all material information regarding the Company's financial condition, results of operations, business, properties, assets, liabilities, management, projections, appraisals, communications with creditors, and plans, proposals and prospects, including information that may affect the trading price of the Shares is currently known to the Seller and will be known to the Purchaser at the time it completes the transactions contemplated by this Agreement.

f. Restrictions on Securities. The Shares may only be disposed of in compliance with state and federal securities laws. In connection with any transfer of Shares other than pursuant to an effective registration statement, the Company may require the Purchaser to provide to the Company an opinion of counsel selected by the Purchaser, the form and substance of which opinion shall be reasonably satisfactory to the Company, to the effect that such transfer does not require registration of such transferred Shares under the Securities Act. The Purchaser agrees to the imprinting of a legend on the Shares in the following or substantially similar form:

THE TRANSFER OF THESE SECURITIES HAS NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR UNDER THE SECURITIES LAWS OF ANY OTHER JURISDICTION, AND MAY NOT BE SOLD OR TRANSFERRED OTHER THAN IN ACCORDANCE WITH THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT OF 1933, AS

AMENDED (OR OTHER APPLICABLE LAW), OR AN EXEMPTION THEREFROM.

g. Reliance. The Purchaser is not relying on the Company or any of its employees or agents with respect to the legal, tax, economic and related considerations as to an investment in the Shares and the Purchaser has relied on the advice of, or has consulted with, only its own advisors as it deems necessary or advisable.

h. No General Solicitation. The Purchaser is not aware of, is in no way relying on, and did not become aware of the offering of the Shares through or as a result of, any form of general solicitation or general advertising including, without limitation, any article, notice, advertisement or other communication published in any newspaper, magazine or similar media or broadcast over television or radio, in connection with the offering of the Shares and is not subscribing for Shares and did not become aware of the offering of the Shares through or as a result of any seminar or meeting to which the Purchaser was invited by, or any solicitation of a subscription by, a person not previously known to the Purchaser in connection with investments in securities generally.

i. No Endorsement of Securities. The Purchaser understands that no United States federal or state agency or any other government or governmental agency has passed upon or made any recommendation or endorsement of the Shares.

j. Brokers and Finders. There is no investment banker, broker, finder or other intermediary which has been retained by or is authorized to act on behalf of the Purchaser who might be entitled to any fee or commission from the Purchaser, the Company or any of their respective affiliates upon consummation of the transactions contemplated by this Agreement except as may be noted and disclosed to the Company.

k. Company's Representations and Warranties. Except as set forth in Section 3, the Company makes, and has made, no representation or warranty, express or implied, at law or in equity, in respect of any of the assets, liabilities or operations of the Company or any of its subsidiaries, and any such other representations or warranties are hereby expressly disclaimed. Specifically, but in no way limiting the foregoing sentence, the Purchaser agrees and acknowledges that the Company disclaims any representation or warranty, and the Purchaser agrees that the Company shall not have any liability, with respect to any information concerning the Company or any of its subsidiaries not expressly represented or warranted to in this Agreement.

5. Indemnification.

a. Survival of Representations and Warranties. The representations and warranties made hereunder shall survive the Closing for a period of one (1) year thereafter (the "Expiration Date"). Notwithstanding the preceding sentence, any representation or warranty in respect of which an indemnity may be sought hereof shall survive the time at which it would otherwise terminate pursuant to the preceding sentence, if a claim for indemnification shall have been given to the party against whom such indemnity may be sought prior to the Expiration Date.

b. Company Indemnification. The Company agrees to indemnify and hold harmless, to the fullest extent permitted by law, but without duplication, the Purchaser, including its officers, directors, employees, partners, representatives and agents (each of the foregoing persons being a "Purchaser Indemnified Person"), from and against any and all losses, claims, damages, liabilities, costs and expenses (including documented and reasonable attorneys' fees) (collectively, "Losses"), actually incurred by a Purchaser Indemnified Person arising out of or based upon a material breach by the Company of any its representations or warranties contained in the Agreement or in any agreement, instrument or document delivered by the Company hereunder.

c. Purchaser Indemnification. The Purchaser agrees and covenants to hold harmless and indemnify the Company, including its officers, directors, employees, partners, representatives and agents (each of the foregoing persons being a "Company Indemnified Person"), from and against any and all Losses to which such Company Indemnified Person may become subject under the Securities Act or otherwise which arises out of or is based in any manner upon a material breach by the Purchaser of any its representations or warranties contained in the Agreement or in any agreement, instrument or document delivered by the Purchaser hereunder.

6. Miscellaneous.

a. Entire Agreement. This Agreement constitutes the entire agreement and understanding of the parties with respect to the transactions contemplated hereby and thereby and supersede all prior agreements and understandings with respect hereto or thereto, whether written or oral.

b. No Waiver; Modifications in Writing. No failure or delay by a party in exercising any right, power or remedy hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any such right, power or remedy preclude any other or further exercise thereof or the exercise of any other right, power or remedy. Except as otherwise expressly provided herein with respect to any right

of indemnification, the remedies provided for herein are cumulative and are not exclusive of any remedies that may be available to any party at law or in equity or otherwise. No waiver of or consent to any departure by a party from any provision of this Agreement shall be effective unless signed in writing by the parties entitled to the benefit thereof. No amendment, modification or termination of any provision of this Agreement shall be effective unless signed in writing by all parties. Any amendment, supplement or modification of or to any provision of this Agreement, any waiver of any provision of this Agreement, and any consent to any departure from the terms of any provision of this Agreement, shall be effective only in the specific instance and for the specific purpose for which made or given.

c. Execution in Counterparts. This Agreement may be executed in two counterparts and by the parties hereto on separate counterparts, each of which counterparts, when so executed and delivered, shall be deemed to be an original and all of which counterparts, taken together, shall constitute but one and the same Agreement. Signature by facsimile or electronic PDF file shall constitute original signatures.

d. Binding Effect; Assignment. The rights and obligations of the parties under this Agreement may not be assigned or otherwise transferred to any other person, without the prior written consent of the other party hereto. Except as expressly provided in this Agreement, this Agreement shall not be construed so as to confer any right or benefit upon any person other than the parties to this Agreement, their respective permitted heirs, representatives, executors, successors and assigns. This Agreement shall be binding upon and shall inure to the benefit of the Company, the Purchaser and their respective permitted heirs, representatives, executors, successors and assigns.

e. Governing Law. This Agreement shall be deemed to be a contract made under and shall be governed by and construed in accordance with the internal laws of the State of New York without reference to the principles of conflict of laws.

f. Consent to Jurisdiction and Service of Process. Any suit, action or proceeding arising out of or relating to the Agreement or the transactions contemplated hereby may be instituted in any federal court situated in the State of New York or any state court of the State of New York, and each party agrees not to assert, by way of motion, as a defense or otherwise, in any such suit, action or proceeding, any claim that it is not subject personally to the jurisdiction of such court, that the suit, action or proceeding is brought in an inconvenient forum, that the venue of the suit, action or proceeding is improper or that the Agreement or the subject matter hereof or thereof may not be enforced in or by such court. Each party further irrevocably submits to the jurisdiction of such court in any such suit,

action or proceeding. Nothing herein contained shall be deemed to affect the right of any party to serve process in any manner permitted by law or to commence legal proceedings or otherwise proceed against any other party in any other jurisdiction.

g. Severability. Any provision hereof that is prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such prohibition or unenforceability without invalidating the remaining provisions hereof, and any such prohibition or unenforceability in any jurisdiction shall not invalidate or render unenforceable such provision in any other jurisdiction. To the extent permitted by law, the parties hereto waive any provision of law that renders any such provision prohibited or unenforceable in any respect.

h. Headings. The Article, Section and subsection headings used or contained in this Agreement are for convenience of reference only and shall not affect the construction of this Agreement.

i. Expenses. Each party shall bear its own fees, costs and expenses in connection with the execution, delivery and performance of the Agreement.

j. Publicity. The parties agree that no public release or announcement concerning the Agreement or the transactions contemplated hereby shall be made without advance review and approval by each party hereto, except as otherwise required by applicable law, and which review and approval shall not be unreasonably withheld or delayed.

k. Enforcement. The Purchaser acknowledges that the Company will be irreparably damaged if the provisions of this Agreement applicable to the Purchaser are not specifically enforced. If the Purchaser shall default in any of its obligations under this Agreement or if any representation or warranty made by or on behalf of the Purchaser in this Agreement or in any certificate, report or other instrument delivered under or pursuant to any term hereof or thereof shall be untrue or misleading as of the date made, the Company may proceed to protect and enforce its rights by suit in equity or action at law (without the posting of any bond and without proving that damages would be inadequate), whether for the specific performance of any term contained in this Agreement, injunction against the breach of any such term or in furtherance of the exercise of any power granted in this Agreement, or to enforce any other legal or equitable right of the Company or to take any one of more of such actions. The Company shall be permitted to enforce specifically the terms and provisions hereof in any court of the United States or any state thereof or any other court having jurisdiction, this being in addition to any other remedy to which the Company may be entitled at law or in equity or otherwise.

l. Further Assurances. Each party shall execute and deliver such documents, instruments and agreements and take such further actions as may be reasonably required or desirable to carry out the provisions of this Agreement and the transactions contemplated hereby, and each of the parties hereto shall cooperate with each other in connection with the foregoing.

[SIGNATURE PAGE FOLLOWS]

COUNTERPART SIGNATURE PAGE

IN WITNESS WHEREOF, the undersigned has duly executed this Securities Purchase Agreement as of the date first above written.

PURCHASER:

MACANDREWS & FORBES GROUP LLC

By: _____

Name:

Title:

Address:

COUNTERPART SIGNATURE PAGE

IN WITNESS WHEREOF, the undersigned has duly executed this Securities Purchase Agreement as of the date first above written.

VTV THERAPEUTICS INC.

By: _____

Name:

Title:

Address:

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: October 30, 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: October 30, 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 September 30, 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: October 30, 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 September 30, 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: October 30, 2019

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