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, 2020

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.)**
3980 Premier Dr, Suite 310 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 November 5, 2020**
Class A common stock, par value $0.01 per share	50,786,130
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, 2020

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, 2020 (Unaudited)	December 31, 2019
Assets		
Current assets:		
Cash and cash equivalents	$ 1,827	$ 1,777
Accounts receivable, net	14	5
Prepaid expenses and other current assets	1,306	806
Current deposits	531	250
Total current assets	3,678	2,838
Restricted cash and cash equivalents, long-term	—	2,500
Property and equipment, net	389	461
Operating lease right-of-use assets	499	543
Long-term investments	2,480	2,480
Long-term deposits	—	444
Total assets	$ 7,046	$ 9,266
Liabilities, Redeemable Noncontrolling Interest and Stockholders' Deficit		
Current liabilities:		
Accounts payable and accrued expenses	$ 5,747	$ 7,068
Current portion of operating lease liabilities	149	110
Current portion of contract liabilities	31	31
Current portion of notes payable	2,369	6,172
Total current liabilities	8,296	13,381
Contract liabilities, net of current portion	1,017	1,033
Operating lease liabilities, net of current portion	717	831
Warrant liability, related party	2,715	2,601
Other liabilities	82	260
Total liabilities	12,827	18,106
Commitments and contingencies		
Redeemable noncontrolling interest	45,591	40,183
Stockholders' deficit:		
Class A Common Stock, $0.01 par value; 100,000,000 shares authorized, 49,152,594 and 40,918,522 shares outstanding as of September 30, 2020 and December 31, 2019, respectively	492	409
Class B Common Stock, $0.01 par value; 100,000,000 shares authorized, and 23,094,221 outstanding as of September 30, 2020 and December 31, 2019	232	232
Additional paid-in capital	201,243	183,858
Accumulated deficit	(253,339)	(233,522)
Total stockholders' deficit attributable to vTv Therapeutics Inc.	(51,372)	(49,023)
Total liabilities, redeemable noncontrolling interest and stockholders' deficit	$ 7,046	$ 9,266

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,	
	2020	2019	2020	2019
Revenue	$ 7	$ 8	$ 15	$ 2,757
Operating expenses:				
Research and development	1,768	3,663	8,481	10,713
General and administrative	1,071	1,770	5,216	6,548
Total operating expenses	2,839	5,433	13,697	17,261
Operating loss	(2,832)	(5,425)	(13,682)	(14,504)
Other income	—	—	—	1
Other (expense) income – related party	814	(146)	(114)	1,050
Interest income	—	15	12	41
Interest expense	(235)	(404)	(625)	(1,544)
Loss before income taxes and noncontrolling interest	(2,253)	(5,960)	(14,409)	(14,956)
Income tax provision	—	—	—	100
Net loss before noncontrolling interest	(2,253)	(5,960)	(14,409)	(15,056)
Less: net loss attributable to noncontrolling interest	(720)	(2,352)	(4,784)	(6,411)
Net loss attributable to vTv Therapeutics Inc.	$ (1,533)	$ (3,608)	$ (9,625)	$ (8,645)
Net loss attributable to vTv Therapeutics Inc. common shareholders	$ (1,533)	$ (4,115)	$ (9,625)	$ (12,880)
Net loss per share of vTv Therapeutics Inc. Class A Common Stock, basic and diluted	$ (0.03)	$ (0.13)	$ (0.21)	$ (0.46)
Weighted-average number of vTv Therapeutics Inc. Class A Common Stock, basic and diluted	48,238,285	32,126,130	45,796,298	27,709,486

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, 2020

	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, 2020	**$ 63,378**	**47,943,495**	**$ 479**	**23,094,221**	**$ 232**	**$ 198,634**	**$ (268,873)**	**$ (69,528)**
Net loss	(720)	—	—	—	—	—	(1,533)	(1,533)
Share-based compensation	—	—	—	—	—	171	—	171
Issuance of Class A Common Stock under ATM offering	—	1,209,099	13	—	—	2,438	—	2,451
Change in redemption value of noncontrolling interest	(17,067)	—	—	—	—	—	17,067	17,067
Balances at September 30, 2020	**$ 45,591**	**49,152,594**	**$ 492**	**23,094,221**	**$ 232**	**$ 201,243**	**$ (253,339)**	**$ (51,372)**

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			
Balances 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)**

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, 2020

	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, 2019	**$ 40,183**	**40,918,522**	**$ 409**	**23,094,221**	**$ 232**	**$ 183,858**	**$ (233,522)**	**$ (49,023)**
Net loss	(4,784)	—	—	—	—	—	(9,625)	(9,625)
Share-based compensation	—	—	—	—	—	737	—	737
Issuance of Class A Common Stock under ATM offering	—	3,847,405	39	—	—	9,692	—	9,731
Issuance of Class A Common Stock to a related party under the Letter Agreements	—	4,375,000	44	—	—	6,956	—	7,000
Vesting of restricted stock units	—	11,667	—	—	—	—	—	—
Change in redemption value of noncontrolling interest	10,192	—	—	—	—	—	(10,192)	(10,192)
Balances at September 30, 2020	**$ 45,591**	**49,152,594**	**$ 492**	**23,094,221**	**$ 232**	**$ 201,243**	**$ (253,339)**	**$ (51,372)**

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)**

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, 2020	2019
Cash flows from operating activities:		
Net loss before noncontrolling interest	$ (14,409)	$ (15,056)
Adjustments to reconcile net loss before noncontrolling interest to net cash used in operating activities:		
Loss (gain) on disposal of property and equipment, net	—	(312)
Depreciation expense	72	24
Share-based compensation expense	737	1,095
Change in fair value of warrants, related party	114	(1,050)
Amortization of debt discount	340	450
Changes in assets and liabilities:		
Accounts receivable	(9)	(8)
Prepaid expenses and other assets	(781)	659
Long-term deposits	444	(408)
Accounts payable and accrued expenses	(1,352)	(788)
Accreted interest on debt	(750)	—
Contract liabilities	(16)	(1,748)
Other liabilities	(178)	—
Net cash used in operating activities	(15,788)	(17,142)
Cash flows from investing activities:		
Proceeds from sale of assets	—	310
Net cash provided by investing activities	—	310
Cash flows from financing activities:		
Proceeds from issuance of Class A Common Stock to a related party under the Letter Agreements	7,000	19,500
Proceeds from issuance of Class A Common Stock, net of offering costs	9,731	5,443
Proceeds from debt issuance	500	500
Repayment of notes payable	(3,893)	(7,858)
Net cash provided by financing activities	13,338	17,585
Net (decrease) increase in cash, cash equivalents and restricted cash and cash equivalents	(2,450)	753
Total cash, cash equivalents and restricted cash and cash equivalents, beginning of period	4,277	4,183
Total cash, cash equivalents and restricted cash and cash equivalents, end of period	$ 1,827	$ 4,936
Non-cash activities:		
Change in redemption value of noncontrolling interest	$ 10,192	$ (18,803)
Issuance of Letter Agreements and warrants to purchase vTv Therapeutics Inc. Class A Common Stock to a related party	$ —	$ 492

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 is a clinical-stage pharmaceutical company focused on treating metabolic diseases to minimize their long-term complications through end-organ protection.

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 pharmaceutical company focused on treating metabolic diseases to minimize their long-term complications through end-organ protection.

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, 2020, various holders own non-voting interests in vTv LLC, representing a 32.0% economic interest in vTv LLC, effectively restricting vTv Therapeutics Inc.'s interest to 68.0% 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 10). 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, September 26, 2019 and December 23, 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, 2020, 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, 2020, the Company had an accumulated deficit of $253.3 million and has generated net losses in each year of its existence.

As of September 30, 2020, the Company's liquidity sources included cash and cash equivalents of $1.8 million and $3.0 million of remaining funds available under the Letter Agreements. Further, we had remaining availability of $2.8 million under our Controlled Equity Offering℠ Sales Agreement (the "Sales Agreement") with Cantor Fitzgerald & Co. ("Cantor Fitzgerald") pursuant to which the Company may offer and sell, from time to time shares of the Company's Class A Common Stock (the "ATM Offering"). See Note 9 for further details. Based on the Company's current operating plan, management believes that its current cash and cash equivalents, the remaining funds available under the Letter Agreements, and the funds received under the ATM Offering, the remaining balance of which was sold subsequent to September 30, 2020, will allow the Company to meet its liquidity requirements through December 2020, which is less than twelve months from the issuance of these Condensed Consolidated Financial Statements. These conditions raise substantial doubt about the Company's ability to continue as a going concern. The Company is 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 and we cannot be certain that additional financing will be available on acceptable terms, or at all. Even if we are able to obtain additional debt or equity financing, it may contain restrictions on our operations or cause substantial dilution to our stockholders.

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.

The full extent to which the COVID-19 outbreak / pandemic will directly or indirectly impact our business, results of operations and financial condition, including licensing revenues, expenses, reserves and allowances, manufacturing, clinical trials, research and development costs and employee-related amounts will depend on future developments that are highly uncertain, including as a result of new information that may emerge concerning COVID-19 and the actions taken to contain or treat COVID-19, as well as the economic impact on local, regional, national and international suppliers and markets.

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, 2020, Condensed Consolidated Statements of Operations for the three and nine months ended September 30, 2020 and 2019, Condensed Consolidated Statement of Changes in Redeemable Noncontrolling Interest and Stockholders' Deficit for the three and nine months ended September 30, 2020 and 2019 and Condensed Consolidated Statements of Cash Flows for the nine months ended September 30, 2020 and 2019 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, 2019 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, 2020, the results of operations for the three and nine months ended September 30, 2020 and 2019 and cash flows for the nine months ended September 30, 2020 and 2019. The December 31, 2019 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, 2020 and 2019 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 and nine months ended September 30, 2019, respectively. Revenue for the three and nine months ended September 30, 2020 was insignificant.

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 as of December 31, 2019 was $2.5 million. This amount relates to the minimum balance that the Company was required to maintain in a deposit account that was pledged to secure the Loan Agreement and was subject to an account control agreement pursuant to the Loan Agreement. There were no restricted cash and cash equivalents as of September 30, 2020, as the Loan Agreement was amended to remove the minimum cash balance requirements (See Note 5 for further details).

The following table provides a reconciliation of cash, cash equivalents and restricted cash and cash equivalents reported within the Condensed Consolidated Balance Sheets as of September 30, 2020 and December 31, 2019 that sum to the total of the same such amounts shown in the Condensed Consolidated Statements of Cash Flows (in thousands):

	September 30, 2020	December 31, 2019
Cash and cash equivalents	$ 1,827	$ 1,777
Restricted cash and cash equivalents, long-term	—	2,500
Total cash, cash equivalents and restricted cash and cash equivalents shown in the consolidated statement of cash flows	$ 1,827	$ 4,277

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, 2020 and December 31, 2019. 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, 2020 and 2019 either due to impairment or based on observable price changes.

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

There have been no recently accounting pronouncements which are expected to have a material impact on the Company's financial statements.

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, 2020. No revenue related to this performance obligation was recognized for the three and nine months ended September 30, 2020 or the three months ended September 30, 2019. For the nine months ended September 30, 2019, the Company recognized revenue related to this performance obligation of $1.7 million.

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"), should Huadong require it to do so. If conducted, the Phase 2 MRCT will include 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, 2020. No revenue related to this combined performance obligation was recognized during the three and nine months ended September 30, 2020 and 2019.

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, 2020. 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. Since the Company has not yet begun the Phase 2 MRCT trial, no revenue for this performance obligation has yet been recognized. The expectation of when, or if, the Phase 2 MRCT trial will begin remains indeterminate.

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, 2020 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, 2020 was $0.1 million. An immaterial amount of revenue for this performance obligation has been recognized during the nine months ended September 30, 2020.

There have been no adjustments to the transaction price for the performance obligations under the Huadong License Agreement during the three and nine months ended September 30, 2020.

Newsoara License Agreement

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

The Company has fully allocated the transaction price to the license and the technology transfer services which represents a single performance obligation because they were not capable of being distinct on their own. The Company recognized revenue for this performance obligation using the straight-line method over the transfer service period. The revenue for this performance obligation has been fully recognized as of September 30, 2020. No revenue related to this performance obligation was recognized during the three and nine months ended September 30, 2020. 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 was 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. 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, 2020, the Company had received funding under this agreement of $3.0 million. Research and development costs have been offset by a total of $3.0 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, 2020	December 31, 2019
Current portion of contract liabilities	$ 31	$ 31
Contract liabilities, net of current portion	1,017	1,033
Total contract liabilities	$ 1,048	$ 1,064

The change in the Company's contract liabilities for the nine months ended September 30, 2020 of an immaterial amount was due to the recognition of amounts included in the contract liability at the beginning of the period.

Note 4: Share-Based Compensation

The Company has 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, 2020, the Company had total unrecognized stock-based compensation expense for its outstanding stock option awards of approximately $1.0 million, which is expected to be recognized over a weighted average period of 1.6 years. The weighted average grant date fair value of option grants during the nine months ended September 30, 2020 and 2019 was $2.26 and $1.93 per option, respectively. The aggregate intrinsic value of the in-the-money awards outstanding at September 30, 2020 was de minimis.

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,	
	2020	2019
Expected volatility	120.37%	115.29% - 117.94%
Expected life of option, in years	5.7	5.8 - 6.0
Risk-free interest rate	0.39%	1.88% - 2.64%
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, 2020:

	Number of Shares	Weighted-Average Exercise Price
Awards outstanding at December 31, 2019	2,531,143	$ 6.19
Granted	86,250	2.65
Forfeited	(17,202)	5.24
Awards outstanding at September 30, 2020	2,600,191	$ 6.08
Options exercisable at September 30, 2020	1,837,065	$ 7.63
Weighted average remaining contractual term	6.2 Years	
Options vested and expected to vest at September 30, 2020	2,552,591	$ 6.15
Weighted average remaining contractual term	6.9 Years	

The following table summarizes the activity related to the RSU awards for the nine months ended September 30, 2020:

	Number of Shares	Weighted-Average Grant Date Fair Value
Awards outstanding at December 31, 2019	11,667	$ 5.81
Vested	(11,667)	5.81
Awards outstanding at September 30, 2020	—	$ —
RSUs expected to vest at September 30, 2020	—	$ —

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,	
	2020	2019	2020	2019
Research and development	$ 48	$ 154	$ 249	$ 369
General and administrative	123	259	488	726
Total share-based compensation expense	$ 171	$ 413	$ 737	$ 1,095

Note 5: Notes Payable

Notes payable consist of the following (in thousands):

	September 30, 2020	December 31, 2019
Notes payable under the Loan Agreement	$ 1,313	$ 4,896
Short-term financing	334	144
Accreted final payment	722	1,132
Total notes payable	2,369	6,172
Less: Current portion	(2,369)	(6,172)
Total notes payable, net of current portion	$ —	$ —

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. On April 1, 2020, the Company entered into an amendment to the Loan Agreement (the "Second Amendment") and on July 29, 2020, the Company entered into the Third Amendment to the Loan Agreement. These amendments extended the maturity dates of the loans and adjusted the minimum cash balance requirements and their impacts have been incorporated into these disclosures and are more fully described below.

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 originally 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 connection with the Third Amendment, the maturity date of the first tranche was extended to September 1, 2020. In addition, a final payment for the first tranche loan equal to $0.8 million originally due on May 1, 2020 was extended to September 1, 2020 as part of the Third Amendment, 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 originally required 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 connection with the Second Amendment, the maturity date of the second tranche was extended to January 1, 2021. In addition, a final payment for the second tranche loan equal to $0.5 million was originally due on October 1, 2020, or such earlier date specified in the Loan Agreement. In connection with the Second Amendment, the due date for this final payment was extended to January 1, 2021, or such earlier date specified in the Loan Agreement. The total amount of the payment was increased to $0.8 million as a result of the Second and Third Amendments. For each of the first and second tranches, the combined Second and Third Amendment required only monthly interest payments on the outstanding principal balance for the amounts due from April 1, 2020, through August 1, 2020. As amended, the remaining principal balance and final interest payment under the first tranche was paid upon maturity. Further, the Second and Third Amendments require equal monthly principal payments plus accrued interest for the second tranche beginning September 1, 2020 through the scheduled maturity on January 1, 2021.

If the Company repays all or a portion of the loan prior to the applicable maturity dates, as amended, it will pay the Lenders a prepayment penalty fee, based on a percentage of the then outstanding principal balance equal to 2.0%.

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. Prior to the Second and Third Amendments, the Company was required to maintain a 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. In connection with the Third Amendment, the minimum

cash requirement was eliminated. 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.

The costs incurred in connection with the Loan Agreement, along with the allocated fair value of the common stock warrants issued upon execution of the Loan Agreement are 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, 2020 and December 31, 2019. The Second and Third Amendments were considered modifications to the existing agreement for accounting purposes. As such, the Company determined a new effective interest rate of 21.5% on the debt considering the remaining unamortized cost and the increases to the final payment for the second tranche as a result of these amendments. The related costs will be amortized and the final payments for the first and second loan tranches are accrued as additional interest expense, using the effective interest method over the remaining term of the Loan Agreement.

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 $9.0 million for approval of a product for the treatment of type 1 diabetes, $50.5 million for approval of a product for the treatment of type 2 diabetes, or $115.0 million for approval of a product in any other indication. 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 obligated to act as the sponsor of the Phase 2 MRCT should Huadong require it to do so. If conducted, the Phase 2 MRCT will include 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 and 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. vTv LLC will be responsible for contributing up to $3.0 million in connection with the Phase 2 MRCT. The expectation of when, or if, the Phase 2 MRCT trial will begin remains indeterminate.

Note 7: Leases

The Company leased its former headquarters location under an operating lease that expired 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.

In August 2019, the Company leased new office space for its headquarters location under an operating lease. This lease commenced in November 2019 after the completion of certain tenant improvements made by the lessor. The lease includes an option to renew for a five-year term as well as an option to terminate after three years, neither of which have been recognized as part of its related right of use assets or lease liabilities as their election is not considered reasonably certain. Further, this lease does not include any material residual value guarantee or restrictive covenants.

At each of September 30, 2020 and December 31, 2019, the weighted average incremental borrowing rate for the operating leases held by the Company was 13.1%. At September 30, 2020 and December 31, 2019, the weighted average remaining lease terms for the operating leases held by the Company were 4.3 years and 5.1 years, respectively.

Maturities of lease liabilities for the Company's operating leases as of September 30, 2020 were as follows (in thousands):

2020 (remaining three months)	$ 62
2021	255
2022	261
2023	268
2024	275
Thereafter	23
Total lease payments	1,144
Less: imputed interest	(278)
Present value of lease liabilities	$ 866

Operating lease cost and the related operating cash flows for the nine months ended September 30, 2020 and 2019 were immaterial amounts.

Note 8: Redeemable Noncontrolling Interest

The Company is subject to the Exchange Agreement with respect to the vTv Units representing the 32.0% noncontrolling interest in vTv LLC outstanding as of September 30, 2020 (see Note 10). 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, 2020 and December 31, 2019, the redeemable noncontrolling interest was recorded based on the redemption value as of the balance sheet date of $45.6 million and $40.2 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,	
	2020	2019	2020	2019
Net loss attributable to vTv Therapeutics Inc. common shareholders	$ (1,533)	$ (4,115)	$ (9,625)	$ (12,880)
Increase in vTv Therapeutics Inc. accumulated deficit for purchase of LLC Units as a result of common stock issuances	(875)	(4,515)	(6,303)	(14,408)
Change from net loss attributable to vTv Therapeutics Inc. common shareholders and transfers to noncontrolling interest	$ (2,408)	$ (8,630)	$ (15,928)	$ (27,288)

Note 9: Stockholders' Equity

ATM Offering

In April 2020, the Company entered into the Sales Agreement with Cantor as the sales agent, pursuant to which the Company may offer and sell, from time to time, through Cantor, shares of its Class A common stock, par value $0.01 per share, having an

aggregate offering price of up to $13.0 million by any method deemed to be an “at the market offering” as defined in Rule 415(a)(4) under the Securities Act (the “ATM Offering”). The shares are offered and sold pursuant to the Company’s shelf registration statement on Form S-3.

During the three and nine months ended September 30, 2020, the Company sold 1,209,099 and 3,847,405 shares of Class A common stock under the ATM Offering at then-market prices for total gross proceeds of approximately $2.5 million and $10.2 million, respectively. After offering costs and sales commissions owed in connection with the ATM Offering, the Company’s aggregate net proceeds for the three and nine months ended September 30, 2020 were approximately $2.5 million and $9.7 million, respectively.

Note 10:Related-Party Transactions

MacAndrews & Forbes Incorporated

As of September 30, 2020, subsidiaries and affiliates of MacAndrews & Forbes Incorporated (collectively “MacAndrews”) indirectly controlled 23,084,267 shares of the Company’s Class B Common Stock and 34,731,212 shares of the Company’s Class A Common Stock. As a result, MacAndrews’ holdings represent approximately 80.0% 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 11, 2018 Letter Agreement	March 18, 2019 Letter Agreement	September 26, 2019 Letter Agreement	December 23, 2019 Letter Agreement
Aggregate dollar value to be sold under agreement	$10.0 million	$9.0 million	$10.0 million	$10.0 million
Specified purchase price per share	$ 1.84	$ 1.65	$ 1.46	$ 1.60
Expiration date of letter agreement	December 11, 2019	March 18, 2020	September 26, 2020	December 23, 2020
Shares available to be issued under related warrants	340,534	—	400,990	365,472
Exercise price of related warrants	$ 2.12	$ —	$ 1.68	$ 1.84
Expiration date of related warrants	December 11, 2025		September 26, 2026	December 23, 2026
Total shares issued as of September 30, 2020	5,434,783	5,454,546	6,849,316	4,375,000
Remaining shares to be issued as of September 30, 2020	—	—	—	1,875,000

The March 18, 2019 and September 26, 2019 Letter Agreements resulted deemed distributions to MacAndrews of $3.7 million and $0.5 million, respectively. These deemed distribution 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 distribution have been reflected as an increase to the net loss attributable to common shareholders of vTv Therapeutics Inc. for computing net loss per share.

The Letter Agreement Warrants have been 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.

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, 2020, MacAndrews had not exchanged any shares under the provisions of the Exchange 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, 2020.

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 11: Income Taxes

The Company is subject to U.S. federal income taxes as well as state taxes. The Company did not record an income tax provision for the three and nine months ended September 30, 2020. The Company recorded an income tax provision of $0.1 million for the nine months ended September 30, 2019 related 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, 2020 is due to the valuation allowance against the Company's expected net operating losses.

On March 27, 2020, the Coronavirus Aid, Relief and Economic Security Act ("CARES Act") was enacted in response to the COVID-19 outbreak / pandemic. The CARES Act made various tax law changes including among other things (i) increased the limitation under IRC Section 163(j) for 2019 and 2020 to permit additional expensing of interest (ii) enacted a technical correction so that qualified improvement property can be immediately expensed under IRC Section 168(k) and (iii) made modifications to the federal net operating loss rules including permitting federal net operating losses incurred in 2018, 2019, and 2020 to be carried back to each of the five preceding taxable years in order to generate a refund of previously paid income taxes. The Company is currently evaluating the impact of the CARES Act but does not expect it to have a material impact on its financial statements as the Company has historically generated federal net operating losses and maintains a full valuation allowance against its deferred tax assets.

As discussed in Note 10, 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, 2020.

Note 12: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,	
	2020	2019	2020	2019
Numerator:				
Net loss	$ (2,253)	$ (5,960)	$ (14,409)	$ (15,056)
Less: Net loss attributable to noncontrolling interests	(720)	(2,352)	(4,784)	(6,411)
Net loss attributable to vTv Therapeutics Inc.	(1,533)	(3,608)	(9,625)	(8,645)
Less: Deemed distribution to related party (Note 10)	—	(507)	—	(4,235)
Net loss attributable to common shareholders of vTv Therapeutics Inc., basic and diluted	(1,533)	(4,115)	(9,625)	(12,880)
Denominator:				
Weighted-average vTv Therapeutics Inc. Class A Common Stock, basic and diluted	48,238,285	32,126,130	45,796,298	27,709,486
Net loss per share of vTv Therapeutics Inc. Class A Common Stock, basic and diluted	$ (0.03)	$ (0.13)	$ (0.21)	$ (0.46)

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

	September 30, 2020	September 30, 2019
Class B Common Stock (1)	23,094,221	23,094,221
Common stock options granted under the Plan	2,600,191	2,496,143
Restricted stock units	—	11,667
Common stock options granted under Letter Agreements	1,875,000	5,479,453
Common stock warrants	2,014,503	1,649,031
Total	29,583,915	32,730,515

(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 13: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. No such amounts were paid nor was any expense recognized related to restructuring activities during the three or nine months ended September 30, 2020.

Note 14: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, 2020, 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, 2020 and December 31, 2019 (in thousands):

	Balance at September 30, 2020	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)	$ 2,715	$ —	$ —	$ 2,715
Total	$ 2,715	$ —	$ —	$ 2,715

	Balance at December 31, 2019	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Warrant liability, related party (1)	$ 2,601	$ —	$ —	$ 2,601
Total	$ 2,601	$ —	$ —	$ 2,601

(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,
2020					
Warrant liability, related party	$ 2,601	$ 114	$ —	$ —	$ 2,715
Total	$ 2,601	$ 114	$ —	$ —	$ 2,715
2019					
Warrant liability, related party	$ 2,436	$ (1,050)	$ 492	$ —	$ 1,878
Total	$ 2,436	$ (1,050)	$ 492	$ —	$ 1,878

During the three and nine months ended September 30, 2020 and 2019, the Company recognized a loss of $0.8 million and a gain of $0.1 million, respectively, for the three month periods and a loss of $0.1 million and a gain of $1.1 million, respectively, for the nine month periods related to the change in fair value of the Letter Agreement Warrants. 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, 2020 and December 31, 2019 were:

	September 30, 2020	December 31, 2019
Expected volatility	118.39% - 136.33%	110.76% - 123.83%
Risk-free interest rate	0.23% - 0.40%	1.69% - 1.83%

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 15:Subsequent Events

Subsequent to September 30, 2020, the Company has fully utilized the remaining availability under the ATM Offering by issuing 1,633,536 shares of Class A common stock at then-market prices for total gross proceeds of approximately $2.8 million.

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 pharmaceutical company focused on treating metabolic diseases to minimize their long-term complications through end-organ protection. We have an innovative pipeline of first-in-class small molecule clinical and pre-clinical drug candidates for the treatment of a wide range of metabolic diseases and their long-term complications. Our pipeline is led by our programs for the treatment of type 1 diabetes (*TTP399*) and for Alzheimer's disease ("AD") (*azeliragon*). We completed the Simplici-T1 Study, an adaptive Phase 1b/2 study supported by JDRF International ("JDRF"), to explore the effects of *TTP399* in patients with type 1 diabetes at the beginning of 2020. In February 2020, we reported positive results from the Phase 2 - Part 2 confirming phase of this study which achieved its primary objective by demonstrating statistically significant improvements in HbA1c (long-term blood sugar) for *TTP399* compared to placebo. We are working on the design for pivotal and registration studies for *TPP399*, with input from the FDA. In addition to the pivotal studies of *TTP399*, we plan to conduct a mechanistic study in a small number of patients with type 1 diabetes to determine the impact of *TTP399* on ketone body formation during a period of acute insulin withdrawal.

Our second clinical drug candidate in Phase 2 development is *azeliragon* (*TTP488*), an orally administered, small molecule antagonist targeting the receptor for advanced glycation endproducts ("RAGE"). We concluded enrollment of patients in a Phase 2 study to evaluate *azeliragon* as a potential treatment of mild-AD in patients with type 2 diabetes (the "Elevage Study") as of September 2020 and plan to report top-line results for approximately 38 patients, substantially all of the enrolled patients, in December 2020, earlier than previously expected. The ongoing effects of the Coronavirus ("COVID-19") pandemic/outbreak impacted the conduct and timing of the Elevage Study as some of the clinical trial sites at which the Elevage Study is taking place reduced, delayed or suspended activities as precautionary measures and, as a result, saw a decrease in participants seeking to join clinical trials, as more further described in the "Impact of COVID-19" section below.

Finally, we are planning a multiple ascending dose phase 1 study of *HPP737*, an orally administered phosphodiesterase type 4 ("PDE4") inhibitor, to assess the pharmacokinetics, pharmacodynamics, safety and tolerability of *HPP737* in healthy volunteers as part of our psoriasis program. We expect to complete this study in the second quarter of 2021.

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. In June 2020, Reneo Pharmaceuticals ("Reneo") announced positive preliminary results from a recently completed phase 1 clinical study of REN001, a PPAR-delta agonist vTv licensed to Reneo under a license agreement, for primary mitochondrial myopathies ("PMM") and the receipt of Orphan Drug Designation from the FDA for REN001 for the treatment of PMM. Reneo is planning to begin an international phase 2 study in PMM in the first quarter of 2021.

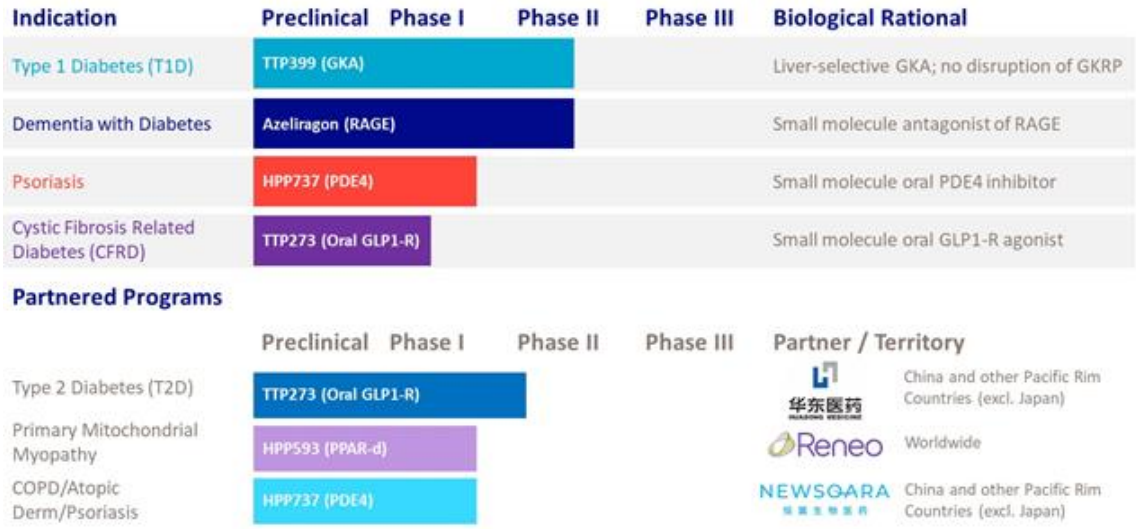
Impact of COVID-19

We have been actively monitoring the COVID-19 pandemic and its impact on our business, employees, patients, partners, suppliers and vendors. Our financial results for the three and nine months ended September 30, 2020 were not significantly impacted by COVID-19. While we continue to conduct final patient visits in the on-going Elevage Study, COVID-19 precautions directly and indirectly impacted the timeline for this clinical trial, as it has for many other clinical trials. In particular, the reduced, delayed or suspended activities of the clinical trial sites participating in the Elevage Study as precautionary measures in response to COVID-19 delayed screening and enrollment of potential subjects into the study which in turn had an impact on the pace of enrollment and total

number of patients enrolled. In response, we have concluded patient enrollment for the Elevage Study as of September 2020 and we will continue to work closely with our IRB and clinical trial sites to conclude the Elevage Study, employing appropriate responses to the requirements of various national, state, and local government and regulatory bodies.

Separately, vTv has continued to make adjustments that allow us to maintain our business operations during the quarter despite current circumstances, including establishing remote working options for all employees. Given the scope of the pandemic, we cannot predict the impact of the progression of the COVID-19 outbreak on future clinical trial and financial results due to a variety of factors, including the continued good health of our employees, the ability of our third party suppliers, vendors, manufacturers and partners to continue to operate and provide services, the ability of our clinical trial sites to continue or resume operations, any further government and/or public actions taken in response to the pandemic and the ultimate duration of the COVID-19 outbreak/pandemic.

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



* Chronic obstructive pulmonary disease

Our Type 1 Diabetes Program –TTP399

In light of the positive results of our Simplici-T1 Study, an adaptive Phase 2 clinical trial of *TTP399* in adult patients with type 1 diabetes, we requested a Type C meeting with the FDA to discuss the trial design and other requirements for the next stage of development for *TTP399*. The Company received written responses from the FDA in June and September 2020. Based upon the responses provided, the Company plans to conduct a placebo-controlled six-month clinical trial in approximately 400 subjects, followed by a second placebo-controlled six-month clinical trial to be initiated nine to twelve months after initiation of the first. The Company would also include a six-month open label extension in the first clinical trial to provide patient data of the necessary duration to support the safety and efficacy of *TTP399*. In its response, the FDA confirmed that the effect size of *TTP399* on events of hypoglycemia as demonstrated in the Phase 2 SimpliciT-1 Study are clinically meaningful and that a reduction in events of hypoglycemia would be an acceptable clinical endpoint for evaluation of a therapy for the treatment of type 1 diabetes.

Finally, the Company is planning to conduct a mechanistic study of *TTP399* in a small number of patients with type 1 diabetes to determine the impact of *TTP399* on ketone body formation during a period of acute insulin withdrawal. The Company proposed the mechanistic study to the FDA and the FDA recommended that the study be performed in support of the planned pivotal trials. The results of this mechanistic study will provide additional evidence to support the effects of *TTP399* on diabetic ketoacidosis (“DKA”) in patients with type 1 diabetes. We expect to initiate the mechanistic study in the first quarter of 2021 and to report top-line results in the second quarter of 2021.

We estimate that the planned development of *TTP399*, including pivotal trials, clinical pharmacology, active pharmaceutical ingredient and drug product development and manufacturing, to cost between $75 and $90 million. Our current planning will continue to evolve based on capital availability, further study planning, discussions with CROs and other supporting vendors, and other factors.

Our Dementia with Diabetes Program – Azeliragon

We are currently conducting the Elevage study, a Phase 2 proof of concept clinical trial to confirm the cognitive benefits evidenced in a post-hoc analysis of the diabetes subgroup (n=47) of the STEADFAST A study. The Company concluded enrollment of the Elevage Study of *azeliragon* in September 2020. Forty-three (43) patients with mild probable Alzheimer's disease and type 2 diabetes were enrolled in the study. The Company plans to report top-line results for approximately 38 patients with six month visits in December 2020. Despite the reduction in total enrollment from what was originally planned, the study is expected to be adequately powered to demonstrate efficacy on the primary endpoint of improved cognition as measured by the ADAS-cog. In other material aspects, the trial has been administered consistent with the protocol, despite the challenges presented by COVID-19. The Company continues to evaluate the ongoing progress of the trial and support efforts to ensure its timely completion.

Our Psoriasis Program - HPP737

We are currently planning a Phase 1, placebo-controlled, multiple-ascending dose clinical trial of *HPP737* to assess the pharmacokinetics, pharmacodynamics, safety and tolerability of HPP737 in healthy volunteers. We expect to initiate this study in the first quarter of 2021 and to report top-line results in the second quarter of 2021.

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, 2020, we have incurred approximately $588.5 million in research and development expenses.

Our research and development expenses by project for the three and nine months ended September 30, 2020 and 2019 were as follows (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Direct research and development expense:				
Azeliragon	$ 1,027	$ 1,875	$ 5,008	$ 5,032
TTP399	449	545	776	1,675
Other projects	60	156	647	490
Indirect research and development expense	232	1,087	2,050	3,516
Total research and development expense	$ 1,768	$ 3,663	$ 8,481	$ 10,713

We plan to continue to incur significant research and development expenses for the foreseeable future as we continue the development of *TTP399*, *azeliragon*, and *HPP737* and further advance the development of our other drug candidates, subject to the availability of additional funding.

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 Venture Loan and Security Agreement (the "Loan Agreement") with Horizon Technology Finance Corporation and Silicon Valley Bank. 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 are required to be paid in cash upon 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, 2020 and 2019

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, 2020	2019	Change
Revenue	$ 7	$ 8	$ (1)
Operating expenses:			
Research and development	1,768	3,663	(1,895)
General and administrative	1,071	1,770	(699)
Total operating expenses	2,839	5,433	(2,594)
Operating loss	(2,832)	(5,425)	2,593
Interest income	—	15	(15)
Interest expense	(235)	(404)	169
Other income (expense), net	814	(146)	960
Loss before income taxes	(2,253)	(5,960)	3,707
Income tax provision	—	—	—
Net loss before noncontrolling interest	(2,253)	(5,960)	3,707
Less: net loss attributable to noncontrolling interest	(720)	(2,352)	1,632
Net loss attributable to vTv Therapeutics Inc.	$ (1,533)	$ (3,608)	$ 2,075

Revenue

Revenue for the three months ended September 30, 2020 and 2019 was insignificant.

Research and Development Expenses

Research and development expenses were $1.8 million and $3.7 million for the three months ended September 30, 2020 and 2019, respectively. The decrease in research and development expenses during the period of $1.9 million, or 51.7%, was primarily due to a decrease in clinical trial costs of $0.8 million for *azeliragon* which was mainly driven by the higher spending in the 2019 period due to the startup activities for the trial and compound manufacturing costs. Additionally, compensation costs decreased $0.7 million due to the reversal of certain performance-based compensation accruals and lower expense related to share-based awards.

General and Administrative Expenses

General and administrative expenses were $1.1 million and $1.8 million for the three months ended September 30, 2020 and 2019, respectively. The decrease of $0.7 million has been primarily driven by the reversal of certain performance-based compensation accruals which are no longer expected to be paid.

Interest Expense

Interest expense was $0.2 million and $0.4 million for the three months ended September 30, 2020 and 2019, respectively. The decrease in interest expense was driven by lower principal balances outstanding in the 2020 period based on the scheduled monthly principal payments under the 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, 2020 and 2019

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, 2020	2019	Change
Revenue	$ 15	$ 2,757	$ (2,742)
Operating expenses:			
Research and development	8,481	10,713	(2,232)
General and administrative	5,216	6,548	(1,332)
Total operating expenses	13,697	17,261	(3,564)
Operating loss	(13,682)	(14,504)	822
Interest income	12	41	(29)
Interest expense	(625)	(1,544)	919
Other (expense) income, net	(114)	1,051	(1,165)
Loss before income taxes	(14,409)	(14,956)	547
Income tax provision	—	100	(100)
Net loss before noncontrolling interest	(14,409)	(15,056)	647
Less: net loss attributable to noncontrolling interest	(4,784)	(6,411)	1,627
Net loss attributable to vTv Therapeutics Inc.	$ (9,625)	$ (8,645)	$ (980)

Revenue

Revenue was insignificant for the nine months ended September 30, 2020 and was $2.8 million for the nine months ended September 30, 2019. During each of these periods, our revenue was related to the recognition of amounts realized from license performance obligations. For the nine months ended September 30, 2019, the revenue recognized related to the amortization of amounts deferred at the initiation of our license agreement with Reneo which were related to the transfer of technology performance obligations and the recognition of a milestone payment under our license agreement with Newsoara.

Research and Development Expenses

Research and development expenses were $8.5 million and $10.7 million for the nine months ended September 30, 2020 and 2019, respectively. The decrease in research and development expenses during the period of $2.2 million, or 20.8%, was primarily due to a decrease in costs for the development of *TTP399* of approximately $0.9 million resulting from the completion of the Simplici-T1 Study in early 2020 as well as decreases in personnel costs of approximately $1.0 million and decreases in facility costs of approximately $0.2 million.

General and Administrative Expenses

General and administrative expenses were $5.2 million and $6.5 million for the nine months ended September 30, 2020 and 2019, respectively. The decrease of approximately $1.3 million was driven primarily by decreases in personnel cost of $1.1 million driven in part by the reversal of accruals for certain performance-based compensation. Additionally, we recognized a reduction in the asset retirement obligation recorded related to our leased facilities as well as a reduction in facility and travel expenses.

Interest Expense

Interest expense was $0.6 million and $1.5 million for the nine months ended September 30, 2020 and 2019, respectively. The decrease in interest expense was driven by lower principal balances outstanding in the 2020 period based on the scheduled monthly principal payments under the 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, 2020, we have an accumulated deficit of $253.3 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, 2020, our liquidity sources included cash and cash equivalents of $1.8 million and $3.0 million of remaining funds available under the letter agreement entered into with MacAndrews and Forbes Group LLC (“MacAndrews”) in December 2019. Further, we had remaining availability

of $2.8 million under our Controlled Equity Offering℠ Sales Agreement (the "Sales Agreement") with Cantor Fitzgerald & Co. ("Cantor Fitzgerald") pursuant to which the Company could offer and sell, from time to time shares of the Company's Class A Common Stock (the "ATM Offering"). The remaining balance of the ATM Offering was sold subsequent to September 30, 2020 for total gross proceeds of $2.8 million. See the "ATM Offering" section below for further details. Note that the Third Amendment to the Loan Agreement eliminated the requirement to maintain a minimum cash balance under the Loan Agreement. Based on our current operating plan, we believe that our current cash and cash equivalents, remaining funds available under the Letter Agreements, and availability under the ATM Offering, if fully utilized, will allow us to meet our liquidity requirements through December 2020. Consequentially, there is substantial doubt about our ability to continue as a going concern. In addition to available cash and cash equivalents and available funds discussed above, we are seeking possible additional partnering opportunities for our GKA, GLP-1r and other drug candidates which we believe may provide additional cash for use in our operations and the continuation of the clinical trials for our drug candidates.

We have concluded enrollment of patients in the Elevage Study and are conducting final patient visits. In addition, we are planning additional trial(s) of *TTP399* in patients with type 1 diabetes, including the mechanistic study and pivotal trials, as well as planning the multiple ascending dose trial of *HPP737*. In order to complete the Elevage Study and to initiate our other planned studies and to 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 and we cannot be certain that additional financing will be available on acceptable terms, or at all. Even if we are able to obtain additional debt or equity financing, it may contain restrictions on our operations or cause substantial dilution to our stockholders .

ATM Offering

On April 24, 2020, we entered into the Sales Agreement with Cantor Fitzgerald pursuant to which the Company may offer and sell, from time to time, through or to Cantor Fitzgerald, as sales agent or principal, shares of the Company's Class A common stock having an aggregate offering price of up to $13.0 million. The Company is not obligated to sell any shares under the Sales Agreement. Under the terms of the Sales Agreement, the Company will pay Cantor Fitzgerald a commission of up to 3% of the aggregate proceeds from the sale of shares and reimburse certain legal fees or other disbursements. As of September 30, 2020, we have sold $10.2 million worth of Class A common stock under the ATM Offering for net proceeds of $9.7 million. Subsequent to September 30, 2020, the Company has fully utilized the remaining availability under the ATM offering by issuing 1,633,536 shares of Class A common stock at then-market prices for total gross proceeds of approximately $2.8 million

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.

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

	December 11, 2018 Letter Agreement	March 18, 2019 Letter Agreement	September 26, 2019 Letter Agreement	December 23, 2019 Letter Agreement
Aggregate dollar value to be sold under agreement	$10.0 million	$9.0 million	$10.0 million	$10.0 million
Specified purchase price per share	$ 1.84	$ 1.65	$ 1.46	$ 1.60
Expiration date of letter agreement	December 11, 2019	March 18, 2020	September 26, 2020	December 23, 2020
Shares available to be issued under related warrants	340,534	—	400,990	365,472
Exercise price of related warrants	$ 2.12	$ —	$ 1.68	$ 1.84
Expiration date of related warrants	December 11, 2025		September 26, 2026	December 23, 2026
Total shares issued as of September 30, 2020	5,434,783	5,454,546	6,849,316	4,375,000
Remaining shares to be issued as of September 30, 2020	—	—	—	1,875,000

Debt Transaction

In October 2016, we and vTv LLC entered into the Loan Agreement with Horizon Technology Finance Corporation and Silicon Valley Bank, under which we have borrowed $20.0 million. This agreement was amended on April 1, 2020 (the "Second Amendment") and again on July 29, 2020 (the "Third Amendment"). The effect of these amendments was to extend the maturity dates of the loans and eliminate the minimum cash balance requirements. 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%. As of November 5, 2020, $0.9 million aggregate principal balance remains outstanding under the Loan Agreement. Additionally, a final interest payment of $0.8 million for the second tranche is due on January 1, 2021.

We borrowed the first tranche of $12.5 million upon the close of the Loan Agreement in October 2016. The first tranche originally 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 connection with the Third Amendment, the maturity date of the first tranche was extended to September 1, 2020. In addition, a final payment for the first tranche loan equal to $0.8 million was paid in connection with the amounts due on September 1, 2020. We borrowed the second tranche of $7.5 million in March 2017. The second tranche originally required 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 connection with the Second Amendment, the maturity date of the second tranche was extended to January 1, 2021. In addition, a final payment for the second tranche loan equal to $0.5 million was originally due on October 1, 2020, or such earlier date specified in the Loan Agreement. In connection with the Second and Third Amendments, the due date for this final payment was extended to January 1, 2021, or such earlier date specified in the Loan Agreement, and the total amount of the payment was increased to $0.8 million. For each of the first and second tranches, the Second and Third Amendments required only monthly interest payments on the outstanding principal balance for the amounts due on April 1, 2020, through September 1, 2020. As amended, the remaining principal balance and final interest payment under the first tranche were payable upon maturity on September 1, 2020. Further, the Second and Third Amendments require equal monthly principal payments plus accrued interest for the second tranche beginning September 1, 2020 through the scheduled maturity date on January 1, 2021.

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 2.0%.

In connection with the Loan Agreement, we 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. 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, which was removed in connection with the Third Amendment. 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% 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. As a result of the termination of the STEADFAST Study, we 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,	
	2020	2019
(dollars in thousands)		
Net cash used in operating activities	$ (15,788)	$ (17,142)
Net cash provided by investing activities	—	310
Net cash provided by financing activities	13,338	17,585
Net (decrease) increase in cash and cash equivalents	$ (2,450)	$ 753

Operating Activities

For the nine months ended September 30, 2020, our net cash used in operating activities decreased $1.3 million from the nine months ended September 30, 2019 due primarily to working capital changes.

Investing Activities

There were no cash flows from investing activities for the nine months ended September 30, 2020. Cash flows from investing activities were $0.3 million for the nine months ended September 30, 2019 and related to the proceeds received from the disposition of certain laboratory equipment.

Financing Activities

For the nine months ended September 30, 2020, net cash provided by financing activities decreased by $4.3 million from the nine months ended September 30, 2019, driven by decreases in funding from equity issuances in the relative periods. Further, repayments under the Loan Agreement decreased as fewer principal payments were made in the 2020 period due to the impact of the Second and Third Amendments.

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. At the same time, we expect our expenses to continue or to increase in connection with our ongoing development activities, particularly as we continue the research, development and clinical trials of, and seek regulatory approval for, our drug candidates. In addition, subject to obtaining regulatory approval of any of our drug candidates, we expect to incur significant commercialization expenses for product sales, marketing, manufacturing and distribution. 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, the remaining funding committed under the Letter Agreements and the amounts received under our ATM Offering, which has been fully utilized subsequent to September 30, 2020, will allow us to meet our liquidity requirements through December 2020. In addition to the available cash and cash equivalents and other sources of liquidity, we are seeking possible additional partnering opportunities for our GKA, GLP-1r and other drug candidates which we believe may provide additional cash for use in our operations and the continuation of the clinical trials for our drug candidates. We are also evaluating several financing strategies to fund the clinical trials of *TTP399*, *azeliragon*, and *HPP737*, including direct equity investments and future public offerings of our common stock. The timing and availability of such financing are not yet known and we cannot be certain that additional financing will be available on acceptable terms, or at all. Even if we are able to obtain additional debt or equity financing, it may contain restrictions on our operations or cause substantial dilution to our stockholders. We have based our estimates on assumptions that may prove to be wrong, and we may use our available capital resources sooner than we currently expect. Because of the numerous risks and uncertainties associated with the development and commercialization of our drug candidates, we are unable to estimate the amounts of increased capital outlays and operating expenditures necessary to complete the development of our drug candidates.

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

- The progress, costs, results and timing of our planned trial(s) to evaluate *TTP399* as a potential treatment of type 1 diabetes, our sequential Phase 2/3 trials to evaluate *azeliragon* as a potential treatment of mild-AD in patients with type 2 diabetes, and our phase 1 trial of *HPP737* as a potential treatment of psoriasis;
- the willingness of the FDA to rely upon our completed and planned clinical and preclinical studies and other work, as the basis for review and approval of our drug candidates;
- 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 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 hire additional 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;
- 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; and
- the impact and duration of the COVID-19 outbreak / pandemic.

Until such time, if ever, as we can generate substantial revenue from drug sales, we expect to finance our cash needs through a combination of equity offerings, debt financings, marketing and distribution arrangements and other collaborations, strategic alliances and licensing arrangements. We do not currently have any committed external source of funds other than those available through the Letter Agreements. Subsequent to September 30, 2020, we have been able to utilize our ATM Offering to provide an additional $2.8 million of funds upon the sale of our Class A common stock. In addition, we are evaluating several financing strategies to fund the on-going and future clinical trials of *TTP399*, *azeliragon*, and *HPP737*, including direct equity investments and future public offerings of our common stock. 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, or pursue one or more alternative strategies, such as restructuring, any of 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, 2020, provide us the right to sell to MacAndrews an additional 1,875,000 shares of our Class A Common Stock at a price of $1.60 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, 2020, we had received funding of $56.0 million under the Letter Agreements and, in exchange, had issued a total of 31,915,546 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, 2019. There have been no material changes to our critical accounting policies and estimates in 2020.

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,” “outlook”, “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 an insignificant amount on an annual basis 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, 2020. Based upon that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that, as of September 30, 2020, 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. The contents of our website are not made a part of this Quarterly Report on Form 10-Q.

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 risk factors listed below and 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, 2019.

The widespread outbreak of an illness or any other communicable disease, or any other public health crisis, could adversely affect our business, results of operations and financial condition.

We could be negatively affected by the widespread outbreak of an illness or any other communicable disease, or any other public health crisis that results in economic and trade disruptions, including the disruption of global supply chains. In March 2020, the World Health Organization declared COVID-19 a pandemic. The COVID-19 pandemic has negatively impacted the global economy, disrupted global supply chains, and created significant volatility and disruption of financial markets. Due to the spread of COVID-19, many countries around the world and jurisdictions in the United States have imposed quarantines and restrictions on travel and mass gatherings to slow the spread of the virus. Further, "non-essential" businesses have been required to close operations or shift to a remote working environment.

Due to the various restrictions put into effect by governments around the world, including the United States and Canada, health professionals may reduce staffing and reduce or postpone meetings with clients in response to the spread of an infectious disease. Such events may result in a period of business disruption, and in reduced operations, any of which could materially affect our business, financial condition and results of operations.

Quarantines, stay-at-home orders and other limitations can disrupt our research and administrative functions, regardless of whether we are actually forced to close our own facilities. Similar disruptions may also affect other organizations and persons that we collaborate with or whose services we are dependent on. The need for our employees and business partners to work remotely also creates greater potential for risks related to cybersecurity, confidentiality and data privacy.

With respect to the COVID-19 outbreak specifically, such outbreak could also potentially affect the operations of the FDA, EMA or other health authorities, which could result in delays in meetings related to planned clinical trials. Further, it may also slow potential enrollment of our ongoing clinical trials. The COVID-19 outbreak and mitigation measures also have had, and may continue to have, an adverse impact on global economic conditions which could have an adverse effect on our business and financial condition, including impairing our ability to raise capital when needed.

Although, as of the date of this Quarterly Report on Form 10-Q, we do not expect any material impact on our long-term activity, the extent to which the COVID-19 outbreak impacts our business and operations will depend on future developments that are highly

uncertain and cannot be predicted, including new information that may emerge concerning the severity of the virus and the actions to contain its impact. As a result, there can be no assurance as to the manner and extent to which the COVID-19 outbreak (or other large-scale disruption) could impact our operations, results and financial condition.

The recent outbreak of COVID-19 may materially and adversely affect our clinical trials, the operations of our licensees and our financial results.

The extent to which COVID-19 may impact our clinical trials will depend on future developments, which are highly uncertain and cannot be predicted with confidence, such as the duration of the outbreak, the severity of COVID-19, or the effectiveness of actions to contain and treat for COVID-19. The continued spread of COVID-19 globally could adversely impact our clinical trial operations in the United States and Canada, including our ability to retain patients in our ongoing Elevage Study or to recruit patients for future planned clinical trials. COVID-19 may also affect the employees and operations of third-party contract research organizations located in affected geographies that we rely upon to carry out such enrollments and trials. Further, it may delay the initiation of any additional clinical trials we are planning for which we require additional approval or are seeking guidance from the FDA or other regulatory agencies. The negative impacts of COVID-19 in these instances may result in delays to our operational plans, increases in our operating expenses, and may have a material adverse effect on our financial results.

Additionally, COVID-19 may hinder the ability of our license partners to continue the development of our licensed product candidates. This may result in the delay or the inability of the partners to execute on their development plans which, in turn, may cause delays in or the inability to achieve the clinical, regulatory and sales milestones which trigger payments to us under the terms of our license agreements. This may have a material adverse effect on our financial results and operations as the related milestone payments may not be received at the expected time, if at all.

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, 2020.

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.

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ITEM 6. EXHIBITS

Exhibit Number	Description
31.1	Certification of President and Chief Executive Officer required by Rule 13a-14(a)/15d-14(a) under the Securities Exchange Act of 1934, as amended, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of Chief Financial Officer required by Rule 13a-14(a)/15d-14(a) under the Securities Exchange Act of 1934, as amended, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certification of President and Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema
101.CAL	XBRL Taxonomy Extension Calculation Linkbase
101.DEF	XBRL Taxonomy Extension Definition Document
101.LAB	XBRL Taxonomy Extension Label Linkbase
101.PRE	XBRL Taxonomy Extension Presentation Linkbase

SIGNATURES

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

Date: November 5, 2020

VTV THERAPEUTICS INC.
(Registrant)

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

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

Exhibit 31.1

SECTION 302 CERTIFICATION

I, Stephen L. Holcombe, certify that:

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

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

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

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

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

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

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

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

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

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

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

Date: November 5, 2020

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: November 5, 2020

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, 2020 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: November 5, 2020

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, 2020 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: November 5, 2020

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