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 June 30, 2021

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 August 4, 2021**
Class A common stock, par value $0.01 per share	60,193,967
Class B common stock, par value $0.01 per share	23,093,860

vTv THERAPEUTICS INC. AND SUBSIDIARIES
INDEX TO FORM 10-Q
FOR THE QUARTER ENDED JUNE 30, 2021

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)

	June 30, 2021 (Unaudited)	December 31, 2020
Assets		
Current assets:		
Cash and cash equivalents	$ 10,835	$ 5,747
Accounts receivable, net	—	158
Prepaid expenses and other current assets	313	939
Current deposits	124	371
Total current assets	11,272	7,215
Property and equipment, net	322	367
Operating lease right-of-use assets	444	482
Long-term investments	9,622	6,725
Total assets	$ 21,660	$ 14,789
Liabilities, Redeemable Noncontrolling Interest and Stockholders' Deficit		
Current liabilities:		
Accounts payable and accrued expenses	$ 4,855	$ 6,120
Current portion of operating lease liabilities	169	155
Current portion of contract liabilities	35	31
Current portion of notes payable	—	84
Total current liabilities	5,059	6,390
Contract liabilities, net of current portion	9	1,009
Operating lease liabilities, net of current portion	587	676
Warrant liability, related party	3,588	2,871
Other liabilities	50	50
Total liabilities	9,293	10,996
Commitments and contingencies		
Redeemable noncontrolling interest	60,190	83,895
Stockholders' deficit:		
Class A Common Stock, $0.01 par value; 200,000,000 shares authorized and 60,193,967 outstanding as of June 30, 2021 and 100,000,000 authorized and 54,050,710 shares outstanding as of December 31, 2020	602	541
Class B Common Stock, $0.01 par value; 100,000,000 shares authorized, and 23,093,860 outstanding as of June 30, 2021 and 23,094,221 as of December 31, 2020	232	232
Additional paid-in capital	224,457	209,161
Accumulated deficit	(273,114)	(290,036)
Total stockholders' deficit attributable to vTv Therapeutics Inc.	(47,823)	(80,102)
Total liabilities, redeemable noncontrolling interest and stockholders' deficit	$ 21,660	$ 14,789

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 June 30,		Six Months Ended June 30,	
	2021	2020	2021	2020
Revenue	$ 9	$ —	$ 996	$ 8
Operating expenses:				
Research and development	2,437	2,509	5,540	6,713
General and administrative	2,242	1,695	4,406	4,145
Total operating expenses	4,679	4,204	9,946	10,858
Operating loss	(4,670)	(4,204)	(8,950)	(10,850)
Other income	2,898	—	2,898	—
Other (expense) income – related party	931	(565)	(717)	(928)
Interest income	—	—	1	12
Interest expense	—	(222)	—	(390)
Loss before income taxes and noncontrolling interest	(841)	(4,991)	(6,768)	(12,156)
Income tax provision	—	—	15	—
Net loss before noncontrolling interest	(841)	(4,991)	(6,783)	(12,156)
Less: net loss attributable to noncontrolling interest	(233)	(1,623)	(1,934)	(4,064)
Net loss attributable to vTv Therapeutics Inc.	$ (608)	$ (3,368)	$ (4,849)	$ (8,092)
Net loss attributable to vTv Therapeutics Inc. common shareholders	$ (608)	$ (3,368)	$ (4,849)	$ (8,092)
Net loss per share of vTv Therapeutics Inc. Class A Common Stock, basic and diluted	$ (0.01)	$ (0.07)	$ (0.08)	$ (0.18)
Weighted-average number of vTv Therapeutics Inc. Class A Common Stock, basic and diluted	58,615,137	45,661,221	57,549,755	44,561,886

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 June 30, 2021

	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 March 31, 2021	**$ 62,647**	**57,571,904**	**$ 576**	**23,093,860**	**$ 232**	**$ 217,647**	**$ (274,730)**	**$ (56,275)**
Net loss	(233)	—	—	—	—	—	(608)	(608)
Share-based compensation	—	—	—	—	—	452	—	452
Issuance of Class A Common Stock under ATM offering	—	2,180,337	22	—	—	5,313	—	5,335
Issuance of Class A Common Stock under LPC Agreement	—	441,726	4	—	—	1,045	—	1,049
Change in redemption value of noncontrolling interest	(2,224)	—	—	—	—	—	2,224	2,224
Balances at June 30, 2021	**$ 60,190**	**60,193,967**	**$ 602**	**23,093,860**	**$ 232**	**$ 224,457**	**$ (273,114)**	**$ (47,823)**

For the three months ended June 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 March 31, 2020	**$ 52,196**	**44,680,189**	**$ 447**	**23,094,221**	**$ 232**	**$ 190,200**	**$ (252,700)**	**$ (61,821)**
Net loss	(1,623)	—	—	—	—	—	(3,368)	(3,368)
Share-based compensation	—	—	—	—	—	186	—	186
Issuance of Class A Common Stock under ATM offering	—	2,638,306	26	—	—	7,254	—	7,280
Issuance of Class A Common Stock to a related party under the Letter Agreements	—	625,000	6	—	—	994	—	1,000
Change in redemption value of noncontrolling interest	12,805	—	—	—	—	—	(12,805)	(12,805)
Balances at June 30, 2020	**$ 63,378**	**47,943,495**	**$ 479**	**23,094,221**	**$ 232**	**$ 198,634**	**$ (268,873)**	**$ (69,528)**

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 six months ended June 30, 2021

	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, 2020	**$ 83,895**	**54,050,710**	**$ 541**	**23,094,221**	**$ 232**	**$ 209,161**	**$ (290,036)**	**$ (80,102)**
Net loss	(1,934)	—	—	—	—	—	(4,849)	(4,849)
Share-based compensation	—	—	—	—	—	888	—	888
Issuance of Class A Common Stock under ATM offering	—	2,180,337	22	—	—	5,313	—	5,335
Exchange of Class B Common Stock for Class A Common Stock	—	361	—	(361)	—	—	—	—
Exercise of stock options	—	20,833	—	—	—	47	—	47
Issuance of Class A Common Stock under LPC Agreement	—	3,941,726	39	—	—	9,048	—	9,087
Change in redemption value of noncontrolling interest	(21,771)	—	—	—	—	—	21,771	21,771
Balances at June 30, 2021	**$ 60,190**	**60,193,967**	**$ 602**	**23,093,860**	**$ 232**	**$ 224,457**	**$ (273,114)**	**$ (47,823)**

For the six months ended June 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	(4,064)	—	—	—	—	—	(8,092)	(8,092)
Share-based compensation	—	—	—	—	—	566	—	566
Issuance of Class A Common Stock under ATM offering	—	2,638,306	26	—	—	7,254	—	7,280
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	27,259	—	—	—	—	—	(27,259)	(27,259)
Balances at June 30, 2020	**$ 63,378**	**47,943,495**	**$ 479**	**23,094,221**	**$ 232**	**$ 198,634**	**$ (268,873)**	**$ (69,528)**

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)

	Six Months Ended June 30,	
	2021	**2020**
Cash flows from operating activities:		
Net loss before noncontrolling interest	$ (6,783)	$ (12,156)
Adjustments to reconcile net loss before noncontrolling interest to net cash used in operating activities:		
Depreciation expense	45	49
Share-based compensation expense	888	566
Change in fair value of investments	(2,897)	—
Change in fair value of warrants, related party	717	928
Amortization of debt discount	—	182
Changes in assets and liabilities:		
Accounts receivable	158	5
Prepaid expenses and other assets	873	670
Accounts payable and accrued expenses	(1,302)	(384)
Contract liabilities	(996)	(8)
Other liabilities	—	(206)
Net cash used in operating activities	(9,297)	(10,354)
Cash flows from financing activities:		
Proceeds from issuance of Class A Common Stock to a related party under the Letter Agreements	—	7,000
Proceeds from issuance of Class A Common Stock, net of offering costs	14,422	7,280
Proceeds from exercise of stock options	47	—
Repayment of notes payable	(84)	(1,811)
Net cash provided by financing activities	14,385	12,469
Net increase in cash, cash equivalents and restricted cash and cash equivalents	5,088	2,115
Total cash, cash equivalents and restricted cash and cash equivalents, beginning of period	5,747	4,277
Total cash, cash equivalents and restricted cash and cash equivalents, end of period	$ 10,835	$ 6,392
Non-cash activities:		
Change in redemption value of noncontrolling interest	$ (21,771)	$ 27,259

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 and inflammatory disorders 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 June 30, 2021, various holders own non-voting interests in vTv LLC, representing a 27.7% economic interest in vTv LLC, effectively restricting vTv Therapeutics Inc.'s interest to 72.3% 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 with MacAndrews and Forbes Group LLC ("M&F Group"), a related party and an affiliate of MacAndrews & Forbes Incorporated (together with its affiliates "MacAndrews"), in December 2017, July 2018, December 2018, March 2019, September 2019 and December 2019 (the "Letter Agreements"), the Controlled Equity Offering℠ Sales Agreement (the "Sales Agreement") with Cantor Fitzgerald & Co. ("Cantor Fitzgerald") (the "ATM Offering"), and the purchase agreement with Lincoln Park Capital Fund, LLC ("Lincoln Park") (the "LPC Purchase Agreement"). vTv Therapeutics Inc. will not be required to provide financial or other support for vTv LLC. 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. 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 June 30, 2021, 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 June 30, 2021, the Company had an accumulated deficit of $273.1 million and has generated net losses in each year of its existence.

As of June 30, 2021, the Company has cash and cash equivalents of $10.8 million. To meet our future funding requirements into the third quarter of 2022, based on our current operating plans, the Company plans to rely primarily on its remaining availability of $50.0 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") and the ability to sell an additional 9,437,376 shares of Class A Common Stock under the LPC Purchase Agreement based on the remaining number of registered shares. However, the ability to use these sources of capital is dependent on a number of factors, including the prevailing market price of and the volume of trading in the Company's Class A Common Stock.

These conditions raise substantial doubt about the Company's ability to continue as a going concern. If we are unable to raise additional capital as and when needed, or upon acceptable terms, such failure would have a significant negative impact on our financial condition.

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

Note 2: Summary of Significant Accounting Policies

Unaudited Interim Financial Information

The accompanying financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP"). The accompanying Condensed Consolidated Balance Sheet as of June 30, 2021, Condensed Consolidated Statements of Operations for the three and six months ended June 30, 2021 and 2020, Condensed Consolidated Statement of Changes in Redeemable Noncontrolling Interest and Stockholders' Deficit for the three and six months ended June 30, 2021 and 2020 and Condensed Consolidated Statements of Cash Flows for the six months ended June 30, 2021 and 2020 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, 2020 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 June 30, 2021, the results of operations for the three and six months ended June 30, 2021 and 2020 and cash flows for the six months ended June 30, 2021 and 2020. The December 31, 2020 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 six months ended June 30, 2021 and 2020 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 customer represented 100% of the revenue earned during the three months and six months ended June 30, 2021. Revenue for the three and six months ended June 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.

Investments

Investments in entities in which the Company has no control or significant influence, is not the primary beneficiary, and have a readily determinable fair value are classified as equity investments with readily determinable fair value. The investments are measured at fair value based on a quoted market price per unit in active markets multiplied by the number of units held without consideration of transaction costs (Level 1). Gains and losses are recorded in other income (expense), net on the Condensed Consolidated Statements of Operations.

Equity investments without readily determinable fair value include ownership rights that do not provide the Company with control or significant influence and these investments do not have readily determinable fair values. The Company has elected to measure its equity investments without readily determinable fair values at cost minus impairment, if any, plus or minus changes resulting from observable price changes in orderly transactions for the identical or similar investment.

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

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

The revenue related to this performance obligation has been fully recognized and no revenue related to this performance obligation was recognized for the three and six months ended June 30, 2021 and 2020. There have been no adjustments to the transaction price for the performance obligations under the Reneo License Agreement during the three and six months ended June 30, 2021 and 2020.

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.

On January 14, 2021, the Company entered into the First Huadong Amendment which eliminated the Company's obligation to sponsor a multi-region clinical trial (the "Phase 2 MRCT"), and corresponding obligation to contribute up to $3.0 million in support of such trial. The amendment also reduced the total potential development and regulatory milestone payments by $3.0 million.

Prior to the First Amendment, the Company had allocated a portion of the transaction price to the obligation to sponsor and conduct a portion of the Phase 2 MRCT. Upon the removal of this performance obligation, the Company evaluated the impact of the modification under the provisions of ASC Topic 606 and performed a reallocation of the transaction price among the remaining performance obligations. This resulted in the recognition of approximately $1.0 million of revenue on a cumulative catch up basis. The majority of the transaction price originally allocated to the Phase 2 MRCT performance obligation was reallocated to the license and technology transfer services combined performance obligation discussed below, which had already been completed. The reallocation of the purchase price in connection with the First Huadong Amendment was made based on the relative estimated selling prices of the remaining performance obligations.

The significant performance obligations under this license agreement, as amended, 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 Company's obligation to participate on a joint development committee (the "JDC"), and (iv) other obligations considered to be de minimis in nature.

The Company has determined that the license and technology transfer services related to the chemistry and manufacturing know-how represent a combined performance obligation because they were not capable of being distinct on their own. The Company also determined that there was no discernable pattern in which the technology transfer services would be provided during the transfer service period. As such, the Company recognized the revenue related to this combined performance obligation using the straight-line method over the transfer service period. The revenue related to this combined performance obligation has been fully recognized as of March 31, 2021. In connection with the First Huadong Amendment, the Company recognized approximately $1.0 million of revenue related to this performance obligation during the six months ended June 30, 2021 due to the reallocation of the transaction price among the performance obligations remaining after the First Huadong Amendment. No revenue related to this combined performance obligation was recognized during the three months ended June 30, 2021 nor the three and six months ended June 30, 2020.

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 June 30, 2021 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 June 30, 2021 was an insignificant amount. An immaterial amount of revenue for this performance obligation has been recognized during the three and six months ended June 30, 2021.

There have been no adjustments to the transaction price for the performance obligations under the Huadong License Agreement during the three and six months ended June 30, 2021 other than the reallocation of the original transaction price among the performance obligations in connection with the First Huadong Amendment as discussed above.

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 June 30, 2021. No revenue related to this performance obligation was recognized and there have been no changes to the transaction price during the three and six months ended June 30, 2021.

Anteris License Agreement

On December 11, 2020, we entered into a license agreement with Anteris Bio, Inc. ("Anteris") (the "Anteris License Agreement"), under which Anteris obtained a worldwide, exclusive and sublicensable license to develop and commercialize the Company's Nrf2 activator, *HPP971*.

Under the terms of the Anteris License Agreement, Anteris paid the Company an initial license fee of $2.0 million. The Company is eligible to receive additional potential development, regulatory, and sales-based milestone payments totaling up to $151.0 million. Anteris is also obligated to pay vTv royalty payments at a double-digit rate based on annual net sales of licensed products. Such royalties will be payable on a licensed product-by-licensed product basis until the latest of expiration of the licensed patents covering a licensed product in a country, expiration of data exclusivity rights for a licensed product in a country, or a specified number of years after the first commercial sale of a licensed product in a country. As additional consideration, the Company received preferred stock representing a minority ownership interest in Anteris.

Pursuant to the terms of the Anteris License Agreement, the Company was required to provide technology transfer services for a 30 day period after the effective date. In accordance with ASC Topic 606, the Company identified all of the performance obligations at the inception of the Anteris License Agreement. The significant obligations were determined to be the license and the technology transfer services. The Company has determined that the license and technology transfer services represent a single performance obligation because they were not capable of being distinct on their own. The transaction price has been fully allocated to this combined performance obligation. As of December 31, 2020, the transaction price consisted of the $2.0 million initial license payment as well as the fair value of the equity interest received in Anteris of $4.2 million. The remaining milestone payments that the Company is eligible to receive were not included in the transaction price as of December 31, 2020, as it was not considered probable that such payments will be received. The revenue related to this performance obligation was fully recognized as of December 31, 2020 as the technology transfer services were considered complete. No revenue related to this performance obligation was recognized and there have been no changes to the transaction price during the three and six months ended June 30, 2021 and 2020

JDRF Agreement

In August 2017, the Company entered into a research and collaboration agreement with JDRF International (the "JDRF Agreement") to support the funding of the Simplici-T1 Study, a Phase 2 study to explore the effects of *TTP399* in patients with type 1 diabetes. The JDRF Agreement was amended in June 2021 to provide additional funding for the Company's mechanistic study exploring the effects of TTP399 on ketone body formation during a period of insulin withdrawal in people with type 1 diabetes. According to the terms of the JDRF Agreement, as amended, JDRF will provide research funding of up to $3.4 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 June 30, 2021, the Company had received funding under this agreement of $3.3 million. Research and development costs have been offset by a total of $3.3 million over the course of this agreement.

Contract Liabilities

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

	June 30, 2021	December 31, 2020
Current portion of contract liabilities	$ 35	$ 31
Contract liabilities, net of current portion	9	1,009
Total contract liabilities	$ 44	$ 1,040

The change in the Company's contract liabilities for the six months ended June 30, 2021 was due to the recognition of amounts included in the contract liability at the beginning of the period caused by the reallocation of the transaction price in connection with the First Huadong Amendment discussed above.

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 June 30, 2021, the Company had total unrecognized stock-based compensation expense for its outstanding stock option awards of approximately $3.0 million, which is expected to be recognized over a weighted average period of 2.2 years. The weighted average grant date fair value of option grants during the six months ended June 30, 2021 and 2020 was $2.21 and $2.26 per option, respectively. The aggregate intrinsic value of the in-the-money awards outstanding at June 30, 2021 was $0.5 million.

The following table summarizes the activity related to the stock option awards for the six months ended June 30, 2021:

	Number of Shares	Weighted-Average Exercise Price
Awards outstanding at December 31, 2020	4,453,357	$ 4.41
Granted	70,000	2.56
Exercised	(20,833)	2.24
Forfeited	(28,121)	15.00
Awards outstanding at June 30, 2021	4,474,403	$ 4.32
Options exercisable at June 30, 2021	2,148,776	$ 6.71
Weighted average remaining contractual term	5.8 Years	
Options vested and expected to vest at June 30, 2021	4,256,790	$ 4.44
Weighted average remaining contractual term	7.5 Years	

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2021	2020	2021	2020
Research and development	$ 180	$ 68	$ 356	$ 201
General and administrative	272	118	532	365
Total share-based compensation expense	$ 452	$ 186	$ 888	$ 566

Note 5: Investments

In connection with the Reneo and Anteris License Agreements, the Company has received equity interests representing a minority equity interest in each investee. Reneo completed its initial public offering in April 2021. Prior to Reneo becoming a publicly-traded company, the Company's investment in Reneo did not have a readily determinable fair value and was measured at cost less impairment under the measurement alternative. Subsequent to Reneo's initial public offering, the Company's investment in Reneo is considered to have a readily determinable fair value and, as such, is adjusted to its fair value each period with changes in fair value recognized as a component of net loss.

The Company's investment in Anteris does not have a readily determinable fair value and is measured at cost less impairment, adjusted for any changes in observable prices. In each instance, the Company owns less than 20% of the voting equity of the investee and does not have the ability to exercise significant influence over the investees. The investments are classified as long-term investments in the Company's Condensed Consolidated Balance Sheets.

The Company's investments consist of the following:

	June 30, 2021	December 31, 2020
Equity investment with readily determinable fair value:		
Reneo common stock	$ 5,378	$ —
Equity investment without readily determinable fair values assessed under the measurement alternative:		
Reneo common stock	—	2,480
Anteris preferred stock	4,245	4,245
Total	$ 9,623	$ 6,725

No adjustments have been made to the value of the Company's investment in Anteris since its initial measurement either due to impairment or based on observable price changes. During the three and six months ended June 30, 2021, the Company recognized an unrealized gain on its investment in Reneo of $2.9 million. This gain was recognized as a component of other income in the Company's Condensed Consolidated Statements of Operations.

Note 6: Notes Payable

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 and, in certain instances, provided for interest only payments for certain periods. The Company fully repaid the amounts due under the Loan Agreement in December 2020 in accordance with the stated terms of the agreement as amended and the agreement was then terminated.

Each loan tranche bore 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. As amended, the first tranche required only monthly interest payments until May 1, 2018 followed by monthly payments of principal plus accrued interest through the amended maturity date on September 1, 2020. In addition, a final payment for the first tranche loan equal to $0.8 million was due on September 1, 2020, or such earlier date specified in the Loan Agreement, as amended. The Company borrowed the second tranche of $7.5 million in March 2017. The second tranche required only monthly interest payments until October 1, 2018 followed by monthly payments of principal plus accrued interest through the amended maturity date on January 1, 2021. In addition, a final payment for the second tranche loan equal to $0.8 million was due on January 1, 2021, or such earlier date specified in the Loan Agreement as amended.

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 were amortized and the final payments for the first and second loan tranches were accrued as additional interest expense, using the effective interest method over the term of the Loan Agreement.

Note 7: 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, prior to its amendment in January 2021, vTv LLC was obligated to act as the sponsor of the Phase 2 MRCT should Huadong require it to do so. The Phase 2 MRCT was to include sites in both US and the Huadong License Territory for the purpose of assessing the safety and efficacy of *TTP273* in patients with type 2 diabetes and was to 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 was responsible for contributing up to $3.0 million in connection with the Phase 2 MRCT. In connection with the First Huadong Amendment, discussed further in Note 3, the Company's obligation to sponsor and contribute funding to the Phase 2 MRCT was eliminated from the Huadong License Agreement.

Note 8: Leases

The Company leases 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 June 30, 2021 and December 31, 2020, the weighted average incremental borrowing rate for the operating leases held by the Company was 13.1%. At June 30, 2021 and December 31, 2020, the weighted average remaining lease terms for the operating leases held by the Company were 3.6 years and 4.1 years, respectively.

Maturities of lease liabilities for the Company's operating leases as of June 30, 2021 were as follows (in thousands):

2021 (remaining six months)	$	128
2022		261
2023		268
2024		275
2025		23
Thereafter		—
Total lease payments		955
Less: imputed interest		(199)
Present value of lease liabilities	$	756

Operating lease cost and the related operating cash flows for the six months ended June 30, 2021 and 2020 were immaterial amounts.

Note 9: Redeemable Noncontrolling Interest

The Company is subject to the Exchange Agreement with respect to the vTv Units representing the 27.7% noncontrolling interest in vTv LLC outstanding as of June 30, 2021 (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 June 30, 2021 and December 31, 2020, the redeemable noncontrolling interest was recorded based on the redemption value as of the balance sheet date of $60.2 million and $83.9 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 June 30,		For the Six Months Ended June 30,	
	2021	2020	2021	2020
Net loss attributable to vTv Therapeutics Inc. common shareholders	$ (608)	$ (3,368)	$ (4,849)	$ (8,092)
Increase in vTv Therapeutics Inc. accumulated deficit for purchase of LLC Units as a result of common stock issuances	(115)	(3,006)	(2,525)	(5,429)
Change from net loss attributable to vTv Therapeutics Inc. common shareholders and transfers to noncontrolling interest	$ (723)	$ (6,374)	$ (7,374)	$ (13,521)

Note 10: Stockholders' Equity

Amendment to Certificate of Incorporation

On May 4, 2021, the Company filed an amendment to its Amended and Restated Certificate of Incorporation (the "Charter Amendment") to increase the number of shares of Class A Common Stock that the Company is authorized to issue from 100,000,000 shares of Class A Common Stock to 200,000,000 shares of Class A Common Stock, representing an increase of 100,000,000 shares of authorized Class A Common Stock, with a corresponding increase in the total authorized Common Stock, which includes Class A Common Stock and Class B Common Stock, from 200,000,000 to 300,000,000, and a corresponding increase in the total authorized capital stock, which includes Common Stock and preferred stock, from 250,000,000 shares to 350,000,000 shares.

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.

On January 14, 2021 and June 25, 2021, the Company filed a prospectus supplement in connection with the ATM Offering to increase the size of the at-the-market offering pursuant to which the Company may offer and sell, from time to time, through or to Cantor, as sales agent or principal, shares of the Company's Class A Common Stock, by an aggregate offering price of $5.5 million and $50.0 million, respectively.

During the three and six months ended June 30, 2021, the Company sold 2,180,337 shares of its Class A Common Stock under the ATM Offering for net proceeds of $5.3 million. During the three and six months ended June 30, 2020, the Company sold 2,638,306 shares of its Class A Common Stock under the ATM Offering for net proceeds of $7.3 million.

Lincoln Park Capital Transaction

On November 24, 2020, the Company entered into the LPC Purchase Agreement and a registration rights agreement (the "Registration Rights Agreement"), pursuant to which the Company has the right to sell to Lincoln Park shares of the Company's Class A Common Stock having an aggregate value of up to $47.0 million, subject to certain limitations and conditions set forth in the LPC Purchase Agreement. The Company will control the timing and amount of any sales of shares to Lincoln Park. pursuant to the LPC Purchase Agreement. During the three and six months ended June 30, 2021, the Company sold 441,726 and 3,941,726 shares under the LPC Purchase Agreement, respectively. Total proceeds from these sales were $1.0 million and $9.1 million for the three and six months ended June 30, 2021, respectively.

Note 11: Related-Party Transactions

MacAndrews & Forbes Incorporated

As of June 30, 2021, subsidiaries and affiliates of MacAndrews & Forbes Incorporated (collectively "MacAndrews") indirectly controlled 23,084,267 shares of the Company's Class B Common Stock and 36,606,212 shares of the Company's Class A Common

Stock. As a result, MacAndrews' holdings represent approximately 71.7% 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 previously entered into the Letter Agreements with MacAndrews. Under the terms of the Letter Agreements, the Company had the right to sell to MacAndrews shares of its Class A Common Stock at a specified price per share. 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 the December 23, 2019 Letter Agreement are set forth in the table below:

	December 23, 2019 Letter Agreement
Aggregate dollar value to be sold under agreement	$10.0 million
Specified purchase price per share	$ 1.60
Expiration date of letter agreement	December 23, 2020
Shares available to be issued under related warrants	365,472
Exercise price of related warrants	$ 1.84
Expiration date of related warrants	December 23, 2026
Total shares issued as of June 30, 2021	6,250,000
Remaining shares to be issued as of June 30, 2021	—

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 June 30, 2021, 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 June 30, 2021.

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 12:Income Taxes

The Company is subject to U.S. federal income taxes as well as state taxes. The Company did not record an income tax provision for the three months ended June 30, 2021. The Company's income tax provision for the six months ended June 30, 2021 was a de minimis amount related to foreign withholding taxes. The Company did not record an income tax provision for the three and six months ended June 30, 2020.

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 June 30, 2021 is due to the valuation allowance against the Company's expected net operating losses.

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 June 30, 2021.

Note 13: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 June 30,		For the Six Months Ended June 30,	
	2021	2020	2021	2020
Numerator:				
Net loss	$ (841)	$ (4,991)	$ (6,783)	$ (12,156)
Less: Net loss attributable to noncontrolling interests	(233)	(1,623)	(1,934)	(4,064)
Net loss attributable to common shareholders of vTv Therapeutics Inc., basic and diluted	(608)	(3,368)	(4,849)	(8,092)
Denominator:				
Weighted-average vTv Therapeutics Inc. Class A Common Stock, basic and diluted	58,615,137	45,661,221	57,549,755	44,561,886
Net loss per share of vTv Therapeutics Inc. Class A Common Stock, basic and diluted	$ (0.01)	$ (0.07)	$ (0.08)	$ (0.18)

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

	June 30, 2021	June 30, 2020
Class B Common Stock (1)	23,093,860	23,094,221
Common stock options granted under the Plan	4,474,403	2,617,393
Common stock options granted under Letter Agreements	—	1,875,000
Common stock warrants	2,014,503	2,014,503
Total	29,582,766	29,601,117

(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 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 Company measures the value of its equity investments without readily determinable fair values 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 six months ended June 30, 2021 and 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 equity investments 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 June 30, 2021 and December 31, 2020 (in thousands):

	Balance at June 30, 2021	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:				
Equity securities	$ 5,378	$ 5,378	$ —	$ —
Total	$ 5,378	$ 5,378	$ —	$ —
Liabilities:				
Warrant liability, related party (1)	$ 3,588	$ —	$ —	$ 3,588
Total	$ 3,588	$ —	$ —	$ 3,588

	Balance at December 31, 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)	$ 2,871	$ —	$ —	$ 2,871
Total	$ 2,871	$ —	$ —	$ 2,871

(1) Fair value determined using the Black-Scholes option pricing model. Expected volatility is based on historical volatility of its own stock. 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 six months ended June 30,				
	Balance at January 1	Net Change in fair value included in earnings	Purchases / Issuance	Sales / Repurchases	Balance at June 30,
2021					
Warrant liability, related party	$ 2,871	$ 717	$ —	$ —	$ 3,588
Total	$ 2,871	$ 717	$ —	$ —	$ 3,588
2020					
Warrant liability, related party	$ 2,601	$ 928	$ —	$ —	$ 3,529
Total	$ 2,601	$ 928	$ —	$ —	$ 3,529

During the three and six months ended June 30, 2021, Reneo completed its initial public offering. As a result, the fair value of the Company's investment in Reneo's common stock now has a readily determinable market value and is no longer eligible for the

practical expedient for investments without readily determinable fair market values. As such, the Company's investment in Reneo is adjusted each reporting period to its fair value based on its most recent closing price, which is considered a Level 1 fair value measurement under the fair value hierarchy.

The change in fair value of the Letter Agreement Warrants are 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 June 30, 2021 and December 31, 2020 were:

	June 30, 2021		December 31, 2020	
	Range	Weighted Average	Range	Weighted Average
Expected volatility	125.32% - 151.38%	135.36%	120.53% - 142.07%	128.16%
Risk-free interest rate	0.55% - 0.95%	0.79%	0.26% - 0.50%	0.39%

The weighted average expected volatility and risk-free interest rate was based on the relative fair values of the warrants.

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

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

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

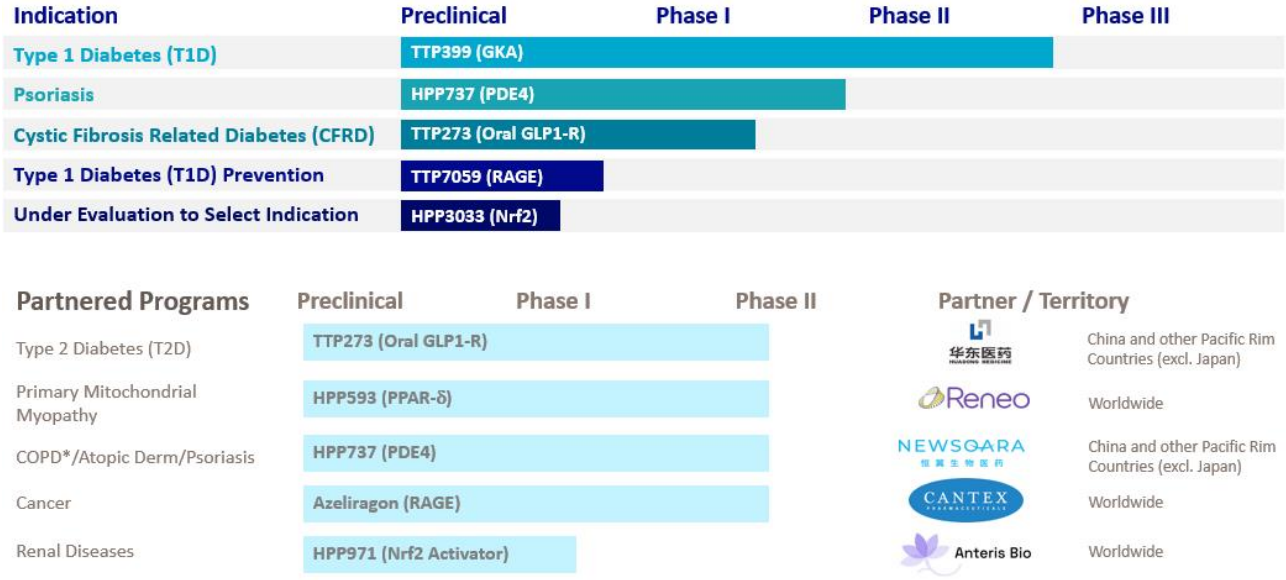
Overview

We are a clinical-stage pharmaceutical company focused on treating metabolic and inflammatory diseases to minimize their long-term complications and improve the lives of patients. 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 diseases. Our pipeline is led by our programs for the treatment of type 1 diabetes (*TTP399*) and for psoriasis (*HPP737*). We completed the Simplici-T1 Study, an adaptive Phase 1b/2 study co-funded 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. In April 2021, we announced that the U.S. Food and Drug Administration granted Breakthrough Therapy designation ("BTD") to *TTP399* for the treatment of type 1 diabetes. In July 2021, we met with the FDA in our first meeting pursuant to BTD to discuss the development program for TTP399. Based upon this initial meeting, we are working on the designs for two pivotal studies of *TTP399* and will continue our dialogue with the FDA as we finalize these study designs. We expect to initiate the pivotal studies during the first half of 2022. In addition to the pivotal studies of *TTP399*, we are currently conducting a Phase 1 mechanistic study of *TTP399* in patients with type 1 diabetes to determine the impact of *TTP399* on ketone body formation during a period of acute insulin withdrawal.

We are also conducting a Phase 1 multiple ascending dose study of *HPP737*, an orally administered phosphodiesterase type 4 ("PDE4") inhibitor, to assess the pharmacokinetics, pharmacodynamics, safety and tolerability of *HPP737* in healthy subjects as part of our psoriasis program. The goal of this study is to confirm the maximum tolerated dose with minimal or no gastrointestinal ("GI") intolerance in the form of nausea, vomiting or diarrhea. We expect results of this study in the third quarter of 2021. We are discussing our proposed Phase 2 study to assess the efficacy and safety of *HPP737* in patients with moderate to severe plaque psoriasis over a 12-week period with the FDA during the third quarter of this year. Following this discussion, we plan to initiate this study in late 2021/early 2022.

In addition to our internal development programs, we are furthering the clinical development of five other programs: a small molecule GLP-1r agonist, the PDE4 inhibitor, *HPP737*, a PPAR-δ agonist, an Nrf2 activator, and the RAGE antagonist, *azeliragon*, through partnerships with pharmaceutical partners via licensing arrangements.

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



* Chronic obstructive pulmonary disease

Our Type 1 Diabetes Program –TTP399

We are conducting a phase 1 mechanistic study of *TTP399* in patients with type 1 diabetes to determine the impact of *TTP399* on ketone body formation during a period of acute insulin withdrawal. We 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 hypothesis that *TTP399* will not increase the risk of diabetic ketoacidosis ("DKA") in patients with type 1 diabetes. We expect to report top-line results in the latter part of the third quarter of 2021 or early in the fourth quarter of 2021.

In April 2021, we announced that the FDA granted BTD for *TTP399* as an adjunctive therapy to insulin for the treatment of type 1 diabetes. This designation provides a sponsor with added support and the potential to expedite development and review timelines for a promising new investigational medicine. In July 2021, we held our first Type B meeting with the FDA pursuant to BTD to discuss the development of *TTP399*. Based upon the outcome of this meeting, we are working on the designs for two pivotal studies of *TTP399* starting in the first half of 2022.

Our Psoriasis Program - HPP737

We have completed dosing in 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 development program. The goal of this study was to continue multiple-dose escalation to define a maximum tolerated dose characterized by minimal or no gastrointestinal intolerance (i.e., nausea, vomiting or diarrhea). We expect to report top-line results from this study in the third quarter of 2021. We are discussing our proposed phase 2 study to investigate *HPP737* as a potential treatment of moderate to severe plaque psoriasis with the FDA during the third quarter of 2021. Following this discussion, we plan to begin this clinical trial in late 2021 or early 2022.

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 June 30, 2021, we have incurred approximately $596.6 million in research and development expenses.

Our research and development expenses by project for the three and six months ended June 30, 2021 and 2020 were as follows (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2021	2020	2021	2020
Direct research and development expense:				
Azeliragon	$ 175	$ 1,580	$ 887	$ 3,981
TTP399	368	(72)	636	328
HPP737	712	58	1,767	102
Other projects	157	159	232	485
Indirect research and development expense	1,025	784	2,018	1,817
Total research and development expense	$ 2,437	$ 2,509	$ 5,540	$ 6,713

We plan to continue to incur significant research and development expenses for the foreseeable future as we continue the development of *TTP399* 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.

Other Income/(Expense)

Other income/expense primarily consists of unrealized gains attributable to the changes in fair value of the equity investments held in our licensees as well the recognition of changes in fair value of the warrants to purchase shares of our Class A common stock held by a related party.

Results of Operations

Comparison of the three months ended June 30, 2021 and 2020

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 June 30, 2021	 2020	 Change
Revenue	$ 9	$ —	$ 9
Operating expenses:			
Research and development	2,437	2,509	(72)
General and administrative	2,242	1,695	547
Total operating expenses	4,679	4,204	475
Operating loss	(4,670)	(4,204)	(466)
Interest income	—	—	—
Interest expense	—	(222)	222
Other income (expense), net	3,829	(565)	4,394
Loss before income taxes	(841)	(4,991)	4,150
Income tax provision	—	—	—
Net loss before noncontrolling interest	(841)	(4,991)	4,150
Less: net loss attributable to noncontrolling interest	(233)	(1,623)	1,390
Net loss attributable to vTv Therapeutics Inc.	$ (608)	$ (3,368)	$ 2,760

Revenue

Revenue for the three months ended June 30, 2021 and 2021 were insignificant.

Research and Development Expenses

Research and development expenses were $2.4 million and $2.5 million for the three months ended June 30, 2021 and 2020, respectively. The decrease in research and development expenses during the period of $0.1 million, or 2.9%, was primarily due to a decrease in clinical trial costs of $1.4 million for *azeliragon* which was mainly driven by discontinuance of its development as a potential treatment of Alzheimer's disease in patients with type 2 diabetes. This decrease was offset by higher spending on *TTP399* and *HPP737* in the 2021 periods due to the ongoing conduct of the DKA mechanistic and multiple-ascending dose studies for those candidates, respectively.

General and Administrative Expenses

General and administrative expenses were $2.2 million and $1.7 million for the three months ended June 30, 2021 and 2020, respectively. The increase of $0.5 million has been primarily driven by the impact of a reversal of an asset retirement obligation related to our leased facility during the three months ended June 30, 2020.

Other Income / (Expense)

Other income was $3.8 million for the three months ended June 30, 2021 and is related to the unrealized gain recognized related to the Company's investment in Reneo as well as gains attributable to the change in fair value of the outstanding warrants in our own stock held by a related party. During the three months ended June 30, 2020, we recognized a $0.6 million loss due to the change in fair value of the outstanding warrants in our own stock held by a related party.

Interest Expense

Interest expense was $0.2 million for the three months ended June 30, 2020 and was related to the cash and non-cash interest for our previous Loan Agreement. Since the Loan Agreement was fully repaid in December 2020, the Company did not incur any interest expense during the three months ended June 30, 2021.

Comparison of the six months ended June 30, 2021 and 2020

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

(dollars in thousands)	**Six Months Ended June 30,**		
Statement of operations data:	**2021**	**2020**	**Change**
Revenue	$ 996	$ 8	$ 988
Operating expenses:			
Research and development	5,540	6,713	(1,173)
General and administrative	4,406	4,145	261
Total operating expenses	9,946	10,858	(912)
Operating loss	(8,950)	(10,850)	1,900
Interest income	1	12	(11)
Interest expense	—	(390)	390
Other income (expense), net	2,181	(928)	3,109
Loss before income taxes	(6,768)	(12,156)	5,388
Income tax provision	15	—	15
Net loss before noncontrolling interest	(6,783)	(12,156)	5,373
Less: net loss attributable to noncontrolling interest	(1,934)	(4,064)	2,130
Net loss attributable to vTv Therapeutics Inc.	$ (4,849)	$ (8,092)	$ 3,243

Revenue

Revenue for the six months ended June 30, 2021 relates to the reallocation of revenue to the license and technology transfer performance obligation made in connection with the First Huadong Amendment. Revenue for the six months ended June 30, 2020 was insignificant.

Research and Development Expenses

Research and development expenses were $5.5 million and $6.7 million for the six months ended June 30, 2021 and 2020, respectively. The decrease in research and development expenses during the period of $1.2 million, or 17.5%, was primarily due to a decrease in clinical trial costs of $3.1 million for *azeliragon* which was mainly driven by discontinuance of its development as a potential treatment of Alzheimer's disease in patients with type 2 diabetes. This decrease was offset primarily by higher spending on *HPP737* of $1.7 million as we were conducting a Phase 1 multiple-ascending dose study for this drug candidate during the six months ended June 30, 2021.

General and Administrative Expenses

General and administrative expenses were $4.4 million and $4.1 million for the six months ended June 30, 2021 and 2020, respectively. The increase of $0.3 million has been primarily driven by the impact of a reversal of an asset retirement obligation related to our leased facility during the three months ended June 30, 2020.

Other Income / (Expense)

Other income was $2.2 million for the six months ended June 30, 2021 and is driven by an unrealized gain recognized related to the Company's investment in Reneo as well as the change in fair value of the outstanding warrants in our own stock. During the six months ended June 30, 2020, we recognized a $0.9 million loss due to the change in fair value of the outstanding warrants in our own stock.

Interest Expense

Interest expense was $0.4 million for the six months ended June 30, 2020 and was related to the cash and non-cash interest for our previous Loan Agreement. Since the Loan Agreement was fully repaid in December 2020, the Company did not incur any interest expense during the six months ended June 30, 2021.

Liquidity and Capital Resources

Liquidity and Going Concern

As of June 30, 2021, we have an accumulated deficit of $273.1 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 June 30, 2021, we had cash and cash equivalents of $10.8 million. To meet our future funding requirements into the third quarter of 2022, based on our current operating plans, we plan to rely on the remaining availability of $50.0 million under our Controlled Equity Offering℠ Sales Agreement (the "Sales Agreement") with Cantor Fitzgerald & Co. ("Cantor Fitzgerald") pursuant to which we could offer and sell, from time to time shares of our Class A Common Stock (the "ATM Offering") and our ability to sell approximately 9.4 million shares of Class A Common Stock to Lincoln Park Capital Fund, LLC ("Lincoln Park") pursuant and subject to the limitations of the purchase agreement (the "LPC Purchase Agreement"). However, the ability to use these sources of capital is dependent on a number of factors, including the prevailing market price of and the volume of trading in our Class A Common Stock. These factors raise substantial doubt about our ability to continue as a going concern.

ATM Offering

We have entered into the Sales Agreement with Cantor Fitzgerald pursuant to which we may offer and sell, from time to time, through or to Cantor Fitzgerald, as sales agent or principal, shares of our Class A Common Stock having an aggregate offering price of up to $68.5 million. We are not obligated to sell any shares under the Sales Agreement. Under the terms of the Sales Agreement, we 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 June 30, 2021, we have sold $18.5 million worth of Class A Common Stock under the ATM Offering for net proceeds of $17.9 million, leaving $50.0 million available to be sold.

Lincoln Park Purchase Agreement

We have entered into the LPC Purchase Agreement, pursuant to which we have the right to sell to Lincoln Park shares of the Company's Class A Common Stock having an aggregate value of up to $47.0 million. As of June 30, 2021, we have issued 5,331,306 of these shares for gross proceeds of approximately $11.1 million.

Over the 36-month term of the LPC Purchase Agreement, we have the right, but not the obligation, from time to time, in our sole discretion, to direct Lincoln Park to purchase up to 250,000 shares per day (the "Regular Purchase Share Limit") of the Class A Common Stock (each such purchase, a "Regular Purchase"). The Regular Purchase Share Limit will increase to 275,000 shares per

day if the closing price of the Class A Common Stock on the applicable purchase date is not below $4.00 per share and will further increase to 300,000 shares per day if the closing price of the Class A Common Stock on the applicable purchase date is not below $5.00 per share. In any case, Lincoln Park's maximum obligation under any single Regular Purchase will not exceed $2,000,000. The purchase price for shares of Class A Common Stock to be purchased by Lincoln Park under a Regular Purchase will be equal to the lower of (in each case, subject to the adjustments described in the LPC Purchase Agreement): (i) the lowest sale price for the Class A Common Stock on the applicable purchase date and (ii) the arithmetic average of the three lowest closing sales prices for the Class A Common Stock during the 10 consecutive trading days prior to the purchase date.

If we direct Lincoln Park to purchase the maximum number of shares of Class A Common Stock that we may sell in a Regular Purchase, then in addition to such Regular Purchase, and subject to certain conditions and limitations in the LPC Purchase Agreement, we may direct Lincoln Park to make an "accelerated purchase" and an "additional accelerated purchase", each of an additional number of shares of Class A Common Stock which may not exceed the lesser of: (i) 300% of the number of shares purchased pursuant to the corresponding Regular Purchase and (ii) 30% of the total number of shares of the Common Stock traded during a specified period on the applicable purchase date as set forth in the LPC Purchase Agreement. The purchase price for such shares will be the lesser of (i) 97% of the volume weighted average price of the Class A Common Stock over a certain portion of the date of sale as set forth in the LPC Purchase Agreement and (ii) the closing sale price of the Class A Common Stock on the date of sale (an "Accelerated Purchase"). Under certain circumstances and in accordance with the LPC Purchase Agreement, we may direct Lincoln Park to purchase shares in multiple Accelerated Purchases on the same trading day.

The LPC Purchase Agreement also prohibits us from directing Lincoln Park to purchase any shares of its Class A Common Stock if those shares, when aggregated with all other shares of Class A Common Stock then beneficially owned by Lincoln Park and its affiliates, would result in Lincoln Park and its affiliates having beneficial ownership, at any single point in time, of more than 9.99% of the then total outstanding shares of Class A Common Stock as calculated pursuant to Section 13(d) of the Securities Exchange Act of 1934, as amended, and Rule 13d-3 thereunder.

Cash Flows

	Six Months Ended June 30,	
	2021	2020
(dollars in thousands)		
Net cash used in operating activities	$ (9,297)	$ (10,354)
Net cash provided by financing activities	14,385	12,469
Net increase in cash and cash equivalents	$ 5,088	$ 2,115

Operating Activities

For the six months ended June 30, 2021, our net cash used in operating activities decreased $1.1 million from the six months ended June 30, 2020 due primarily to working capital changes.

Investing Activities

There were no cash flows from investing activities for the six months ended June 30, 2021 or 2020.

Financing Activities

For the six months ended June 30, 2021, net cash provided by financing activities increased by $1.9 million from the six months ended June 30, 2020, driven by decreases in payments on loans due to the full repayment of the Loan Agreement in December 2020 and higher sales of shares of our Class A Common Stock during the six months ended June 30, 2021.

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.

We plan to finance our operations into the third quarter of 2022 through the use of our cash and cash equivalents and the ability to sell shares of our Class A Common Stock pursuant to the ATM Offering and LPC Purchase Agreement. However, the ability to use these sources of capital is dependent on a number of factors, including the prevailing market price of and the volume of trading in the Company's Class A Common Stock. We are also evaluating additional financing strategies to fund the clinical trials of *TTP399* 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 trials to evaluate *TTP399* as a potential treatment of type 1 diabetes and our planned trial(s) 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 ATM Offering and LPC Purchase Agreement. In addition, we are evaluating several financing strategies to fund the on-going and future clinical trials of *TTP399* 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

As of June 30, 2021, we did not have outstanding any off-balance sheet arrangements as defined under SEC rules.

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, 2020. There have been no material changes to our critical accounting policies and estimates in 2021.

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 for the year ended December 31, 2020. 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 for the year ended December 31, 2020, 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

We do not currently have any material 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 June 30, 2021. Based upon that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that, as of June 30, 2021, 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

Our risk factors are 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, 2020. There have been no material changes to our risk factors from those previously disclosed in our Annual Report on Form 10-K for the year ended December 31, 2020.

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

There were no sales of unregistered equity securities during the three months ended June 30, 2021.

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
3.1*	Amended and Restated Certificate of Incorporation, as amended.
10.1*††	Agreement Concerning Glucokinase Activator Project, dated as of February 20, 2007, by and between Novo Nordisk A/S and TransTech Pharma, Inc.
31.1*	Certification of President and Chief Executive Officer required by Rule 13a-14(a)/15d-14(a) under the Securities Exchange Act of 1934, as amended, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2*	Certification of Chief Financial Officer required by Rule 13a-14(a)/15d-14(a) under the Securities Exchange Act of 1934, as amended, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1*	Certification of President and Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2*	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101*	The following materials from the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2021, formatted in iXBRL (Inline Extensible Business Reporting Language): (i) Condensed Consolidated Balance Sheets (unaudited), (ii) Condensed Consolidated Statements of Operations (unaudited), (iii) Condensed Consolidated Statements of Changes in Redeemable Noncontrolling Interest and Stockholders' Deficit (unaudited), (iv) Consolidated Statements of Cash Flows (unaudited) and (v) Notes to Condensed Consolidated Financial Statements (unaudited), tagged as blocks of text and including detailed tags.
104*	The cover page from this Quarterly Report on Form 10-Q for the quarter ended June 30, 2021, formatted in Inline XBRL

†† Confidential treatment received with respect to portions of this exhibit.
* Filed herewith

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: August 4, 2021

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 3.1

CERTIFICATE OF AMENDMENT
TO
CERTIFICATE OF INCORPORATION
OF
VTV THERAPEUTICS INC.

vTv Therapeutics Inc., a corporation organized and existing under the laws of the State of Delaware (the "Corporation"), hereby certifies as follows:

FIRST: The certificate of incorporation of the Corporation as heretofore in effect is hereby amended by amending and restating Section 4.1 thereof to provide in its entirety as follows:

"4.1 The total number of shares of all classes of stock that the Corporation shall have authority to issue is 350,000,000 shares, consisting of: (i) 300,000,000 shares of common stock, divided into (a) 200,000,000 shares of Class A common stock, with the par value of $0.01 per share (the "Class A Common Stock") and (b) 100,000,000 shares of Class B common stock, with the par value of $0.01 per share (the "Class B Common Stock" and, together with Class A Common Stock, the "Common Stock"); and (ii) 50,000,000 shares of preferred stock, with the par value of $0.01 per share (the "Preferred Stock")."

SECOND: The foregoing amendment was duly adopted in accordance with the provisions of Section 242 of the General Corporation Law of the State of Delaware.

Exhibit 10.1

AGREEMENT CONCERNING GLUCOKINASE ACTIVATOR PROJECTBY AND BETWEEN NOVO NORDISK A/S AND TRANSTECH PHARMA, INC.

DATED AS OF FEBRUARY 20, 2007

* Certain information identified by "[***]" has been excluded from this exhibit because it is both not material and is the type that the registrant treats as private or confidential.

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AGREEMENT CONCERNING GLUCOKINASE ACTIVATOR PROJECT

THIS AGREEMENT CONCERNING GLUCOKINASE ACTIVATOR PROJECT (this "Agreement") is entered into this 20th day of February, 2007 (the "Effective Date"), by and between Novo Nordisk A/S, a corporation organized under the laws of Denmark, having a business address at Novo Allé, DK-2880 Bagsvaerd, Denmark ("Novo"), and TransTech Pharma, Inc., a corporation organized under the laws of the State ofDelaware, having a business address at 4170 Mendenhall Oaks Parkway, High Point, North Carolina 27265, USA ("TransTech").

WHEREAS, on June 22, 2001, Novo and TransTech entered into an Umbrella Research and License Agreement (the "Umbrella Agreement"),pursuant to which, among other things, Novo and TransTech collaborated on a research project relating to Glucokinase Activators (as hereinafter defined) under the terms of a Statement of Work executed on or about July 2, 2001 in connection therewith (the "GK Statement");

WHEREAS, pursuant to Sections 7.1.1 and 7.1.2 of the Umbrella Agreement and the GK Statement, TransTech licensed to Novo certainpatents, patent applications and other intellectual property) relating to the GK Activator Project (as hereinafter defined);

WHEREAS, Novo has developed or used its own proprietary data, patents, patent applications and other intellectual property rights inconnection with its activities under the GK Activator Project;

WHEREAS, TransTech has alleged in writing to Novo that Novo is in breach of its obligations under the Umbrella Agreement with respect tothe GK Activator Project, Novo has denied in writing the existence of any such breach, and the Parties (as hereinafter defined) now wish to resolve all such discussions in the context of this Agreement (the "Breach Issue");

WHEREAS, (a) TransTech desires to obtain, and Novo is willing to (i) have the Reverting Rights (as hereinafter defined) revert to TransTech,and (ii) license to TransTech the Novo Intellectual Property and Novo Materials (as hereinafter defined) in order to develop and commercialize Licensed Products (as hereinafter defined), under the terms and conditions set forth herein, and (b) the Parties desire to resolve amicably the Breach Issue; and

WHEREAS, as of the Effective Date, the Umbrella Agreement and the GK Statement shall terminate and be of no further force and effect;NOW, THEREFORE, in consideration of the premises above and the terms and conditions set forth below, the Parties agree as follows:

ARTICLE I
DEFINITIONS

The following terms, whether used in the singular or plural, shall have the following meanings:

1.1 "Act". Act means both the United States Federal Food, Drug, and Cosmetic Act, as amended from time to time, and the regulations promulgated under the foregoing.

1.2 "Affiliate". Affiliate means any Person directly or indirectly controlled by, controlling or under common control with, a Party, but only for so long as such control shall continue. For purposes of this definition, "control" (including, with correlative meanings, "controlled by", "controlling" and "under common control with") means, with respect to a Person, possession, direct or indirect, of (a) the power to direct or cause direction of the management and policies of such Person (whether through ownership of securities or partnership or other ownership interests, by boardrepresentation, by contract or otherwise), or (b) at least fifty percent (50%) of the voting securities (whether directly or pursuant to any option, warrant or other similar arrangement) or other comparable equity interests. For the avoidance of doubt, neither of the Parties shall be deemed to be an "Affiliate" of the other.

1.3 "Bankruptcy Code". Bankruptcy Code means Title 11 of the United States Code, as amended from time to time.

1.4 "Business Day". Business Day means a day that is not a Saturday, Sunday or a day on which banking institutions in New York, New York, USA are authorized by Law to remain closed.

1.5 "Calendar Quarter". Calendar Quarter means each of the three-month periods during the Term ending on March 31, June 30, September 30 and December 31, respectively.

1.6 "Calendar Year". Calendar Year means each calendar year during the Term.

1.7 "Combination Product". Combination Product means (a) any pharmaceutical product that is a single formulation consisting of a Licensed Product and one or more other active compounds or active ingredients or (b) any combination of a Licensed Product sold together with otherseparately formulated active compounds or active ingredients for a single invoiced price.

1.8 "Commercialization" or "Commercialize". Commercialization or Commercialize means activities directed to obtaining pricing and reimbursement approvals, marketing, promoting, distributing, importing or selling a product. For purposes of clarity, Commercialization shall notinclude any activities related to Manufacturing.

1.9 "Commercialization Partner". Commercialization Partner means a pharma company that (a) receives a sublicense under Section 2.1(c) to Manufacture and Commercialize a Licensed Product, (b) is one of the largest twenty (20) pharma companies in the world by revenue at thetime of granting of such sublicense and (c) is not Novo.

1.10 "Completion". Completion means, with respect to any clinical trial, the earlier of the date on which (a) a final study report is issued that confirms that the efficacy endpoints with respect to such trial support Regulatory Approval in the United States or (b) TransTech elects to proceedto the next phase of Development without regard to the contents of such final study report.

1.11 "Compound". Compound means any Glucokinase Activator and shall be understood in its broadest sense to encompass all types of chemical, biological or biochemical structures and compounds that activate glucokinase through binding with the glucokinase enzyme ("Glucokinase Activators"). Merely to illustrate the breadth of this definition and not by way of limitation, "Compound" includes each and every type of structure or compound of biological or pharmaceutical interest, including small and large molecules, macromolecules and assemblies; saccharides, carbohydrates, lipids, peptides, polypeptides, proteins, amino and nucleic acids and derivatives thereof; cell compounds, products and byproducts, including without limitation antibodies, hormones and enzymes; and various other modulators of biological activity.

1.12 "Control" or "Controlled". Control or Controlled means, with respect to any intellectual property right, other intangible property or any tangible property, the possession (whether by ownership or license (other than pursuant to this Agreement)) by a Party of the ability to grant to the other Party access and/or a license or sublicense as provided herein without violating the terms of any agreement with any Third Party.

1.13 "Cover", "Covering" or "Covered". Cover, Covering or Covered means, with respect to a product or with respect to a technology, process or method, that, in the absence of a license granted under a Valid Claim, the manufacture, use, offer for sale, sale or importation of such product or the practice of such technology, process or method would infringe such Valid Claim (or, in the case of a claim of a patent application that would become a Valid Claim if such application were to issue as a patent, would reasonably likely infringe such claim if such patent application were to issue).

1.14 "Development" or "Develop". Development or Develop means pre-clinical and clinical research and drug development activities, including toxicology, pharmacology and other pre-clinical development efforts, test method development and stability testing, process development, formulation development, delivery system development, quality assurance and quality control development, statistical analysis, clinical studies (including pre- and post-approval studies and investigator sponsored clinical studies), regulatory affairs, and Regulatory Approval and clinical study regulatory activities (excluding regulatory activities directed to obtaining pricing and reimbursement approvals). For purposes of clarity, "Development" and "Develop" includes basic research, screening and discovery activities directed to the identification of new compounds or molecules.

1.15 "EMEA". EMEA means The European Agency for the Evaluation of Medicinal Products and any successor agency thereto.

1.16 "Exclusivity Period". Exclusivity Period means, with respect to a Licensed Product sold in a country in the Territory, that period during which at least one Valid Claim of the Novo Patent Rights Covers the Licensed Product in such country.

1.17 "FDA". FDA means the United States Food and Drug Administration and any successor agency thereto.

1.18 "Field". Field means the prevention, treatment, control, mitigation or palliation of all human or animal diseases or conditions.

1.19 "Filing". Filing means, with respect to an application for Regulatory Approval, that the applicable Regulatory Authority has made a threshold determination that the application is sufficiently complete to permit a substantive review.

1.20 "First Commercial Sale". First Commercial Sale means, with respect to a Licensed Product, the date on which TransTech or one of its Sublicensees or Affiliates completes the first sale of the Licensed Product to a Third Party other than a Sublicensee for a purpose other than Development, Regulatory Approval or scientific testing.

1.21 "GK Activator Project". GK Activator Project means activities by a Party or Parties under the Umbrella Agreement and/or this Agreement on a research project relating to Glucokinase Activators.

1.22 "GAAP". GAAP means accounting principles generally accepted in the United States of America, as in effect from time to time.

1.23 "Governmental Authority". Governmental Authority means any United States federal, state or local or any foreign government, or political subdivision thereof, or any multinational organization or authority or any authority, agency or commission entitled to exercise any administrative, executive, judicial, legislative, police, regulatory or taxing authority or power, any court or tribunal (or any department, bureau or division thereof), or any governmental arbitrator or arbitral body.

1.24 "Indication". Indication means a separate and distinct disease or medical condition that a Licensed Product is intended to prevent, treat, control, mitigate and/or palliate, or for which a Licensed Product has received Regulatory Approval.

1.25 "Initiation". Initiation means, with respect to any clinical trial, the date on which the first volunteer or patient in such trial has received his or her initial dose of the Licensed Product.

1.26 "Know-How". Know-How means proprietary or non-public information and materials, whether patentable or not, including, (a) ideas, discoveries, inventions, improvements or trade secrets, (b) pharmaceutical, chemical and biological materials, products and compositions, (c) tests, assays, techniques, data, methods, procedures, formulas, and/or processes, (d) technical and non-technical data and other information relating to any of the foregoing, (e) drawings, plans, designs, diagrams, sketches, specifications and/or other documents containing or relating to such informationor materials, and (f) business processes, price data and information, marketing data and information, sales data and information, marketing plans and market research.

1.27 "Knowledge". Knowledge means, with respect to a Party, the actual knowledge of an officer of such Party, or any in-house legal counsel of such Party, without any duty to conduct any additional investigation with respect to such facts and information by reason of the executionof, or the transactions contemplated by, this Agreement.

1.28 "Law" or "Laws". Law or Laws means all laws, statutes, rules, codes, regulations, orders, judgments and/or ordinances of any Governmental Authority.

1.29 "Licensed Product". Licensed Product means any pharmaceutical preparation or product comprising a Compound that is Covered by Novo Patent Rights or uses or embodies Novo Know-How and is (a) for sale by prescription, over-the-counter or any other method, or (b) for administration to patients in a clinical trial, and shall include any Licensed Product that is part of a Combination Product.

1.30 "Losses". Losses means any and all (a) claims, losses, liabilities, damages, fines, royalties, governmental penalties or punitive damages, deficiencies, interest, awards, and judgments, (b) with respect to Third Parties, settlement amounts and all of the items referred to in clause(a), which include Third Party special, indirect, incidental, and consequential damages (including lost profits) and Third Party punitive and multiple damages, and (c) in connection with all of the items referred to in clauses (a) and (b) above, any and all costs and expenses (including reasonable attorneys fees and all other expenses reasonably incurred in investigating, preparing or defending any litigation or proceeding, commenced or threatened).

1.31 "Major EU Country". Major EU Country means France, Germany, Italy, Spain or the United Kingdom.

1.32 "Major Markets". Major Markets means the United States, the Major EU Countries and Japan.

1.33 "Manufacture" or "Manufacturing". Manufacture or Manufacturing means activities directed to producing, manufacturing, processing, filling, finishing, packaging, labeling, quality assurance testing and release, shipping and storage of a product.

1.34 "MHW". MHW means the Japanese Ministry of Health and Welfare and any successor agency thereto.

1.35 "NDA". NDA means a New Drug Application or Biologics License Application, as the case may be, as defined in the Act, filed with the FDA with respect to a Licensed Product, or an equivalent application filed with the Regulatory Authority of a country in the Territory otherthan the United States.

1.36 "Net Sales". Net Sales means the gross amounts billed or invoiced by TransTech, its Affiliates and Sublicensees to any Third Party that is not a Sublicensee with respect to sales of Licensed Products in the Territory, calculated in the same manner as reported in its audited financial statements, less the sum of the following:

(a) Discounts, credits, refunds and rebates actually allowed by TransTech, its Affiliates or their Sublicensees in amounts customaryin the trade directly for a Licensed Product;

(b) Sales, import, export, customs, and value added taxes, and duties directly imposed on the Licensed Products and actually paid by TransTech, its Affiliates or their Sublicensees, in each case included as a specific line item on an invoice to such Third Parties;

(c) Actual outbound freight and insurance costs actually paid by TransTech, its Affiliates or their Sublicensees directly on Licensed Products, in each case included as a specific line item on an invoice to such Third Parties;

(d) Amounts actually allowed or credited on returns of sales of Licensed Products by TransTech, its Affiliates or their Sublicensees; and

(e) Amounts that are actually written off as non-collectible for the sale of Licensed Products after TransTech's, its Affiliates' or their Sublicensees' commercially reasonable best efforts to collect such amounts.

In the event that Licensed Products are sold or otherwise commercially disposed of as part of Combination Products, the Net Sales of the Licensed Products, for purposes of determining royalty payments, shall be determined, as to each unit of Combination Product sold or otherwise disposed of, bymultiplying (x) the Net Sales of the Combination Product (determined according to the method set forth above in this Section 1.36) and (y) the Applicable Fraction determined in accordance with the following:

(i) Except as otherwise set forth in this Section 1.36, the "Applicable Fraction" shall be A/(A+B), where A is the averagewholesale price of the Licensed Product when sold separately in finished form and B is the average wholesale price of the other product(s) sold separately in finished form.

(ii) In the event that the average wholesale price of the Licensed Product when sold separately in finished form can be determined but the average wholesale price of the other product(s) when sold separately in finished form cannot be determined, the "Applicable Fraction" shall be A/C, where A is the average wholesale price of the Licensed Product when sold separately in finished form and C is the averagewholesale price of the Combination Product.

(iii) In the event that the average wholesale price of the other product(s) when sold separately in finished form can be determined but the average wholesale price of the Licensed Product when sold separately in finished form cannot be determined, the "Applicable Fraction" shall be (C-D)/C, where D is the average wholesale price of the other product(s) when sold separately in finished form and C is the averagewholesale price of the Combination Product.

(iv) In the event that the average wholesale price of neither the Licensed Product when sold separately in finished form nor the other product(s) when sold separately in finished form can be determined, the "Applicable Fraction" shall be F/(F+G), where F is the fair market value of the Licensed Product contained in the Combination Product and G is the fair market value of all other biologically active substances containedin the Combination Product, as reasonably determined in good faith by the Parties.

(v) The "Applicable Fraction" for a Combination Product shall remain fixed for sales within a single Calendar Year and shall be calculated at the beginning of such Calendar Year and used during all applicable royalty periods for such Calendar Year. The average wholesale prices shall be calculated using the prices actually charged for such Combination Product, Licensed Product or other product(s) by TransTech, its Affiliates or its Sublicensees to any Third Party that is not a Sublicensee in the relevant region during the July-September period in theCalendar Year preceding the calculation.

1.37 "Novo Intellectual Property". Novo Intellectual Property means the Novo Know-How and the Novo Patent Rights.

1.38 "Novo Know-How". Novo Know-How means all Know-How relating to Compounds that is Controlled by Novo as of the Effective Date, including the Novo Materials.

1.39 "Novo Materials". Novo Materials means any Compound discovered or developed by Novo or TransTech pursuant to the Umbrella Agreement and includes the Compounds that Novo labeled as of the Effective Date NNC 0080-0000-0091 (also referred to as NNC 80-0091 and NN9101), NNC 0080-0000-0139 (also referred to as NNC 80-0139 and NN9139), NNC 0080-0000-3315 (also referred to as NNC 80-3315 and NN9108) and NNC 0080-0000-4288 (also referred to as NNC 80-4288), the exact chemical structures of which are provided on Exhibit E annexed to this Agreement, and the Licensed Products and Compounds set forth on Exhibit F annexed to this Agreement.

1.40 "Novo Patent Rights". Novo Patent Rights means (a) the Patent Rights with respect to the patents and applications set forth on Exhibit A annexed to this Agreement and (b) any other Patent Rights that are Controlled by Novo and that Cover Novo Know-How.

1.41 "Party". Party means either TransTech or Novo; "Parties" means both TransTech and Novo.

1.42 "Patent Rights". Patent Rights means, with respect to any patent or patent application, all rights and interests in, to or associated with such patent, patent application or any patent issuing on such application in any jurisdiction in the Territory, including (a) all patents claiming priority from such patent or application or any other application from which such patent or application claims priority, (b) all patents issuing on divisionals, continuations, renewals, continuations-in-part or re-examinations of such patent, application or priority patent or application, and
(c) patents of addition, supplementary protection certificates, extensions, registrations, confirmation patents and reissues with respect to any of the foregoing.

1.43 "Person". Person means any natural person or any corporation, company, partnership, joint venture, firm, Governmental Authority or other entity, including a Party.

1.44 "Phase II Clinical Trial". Phase II Clinical Trial means a human clinical trial in any one or more countries in the Territory that would satisfy the requirements of 21 C.F.R. § 312.21(b).

1.45 "Phase III Clinical Trial". Phase III Clinical Trial means a human clinical trial in any country in the Territory that is registered with the FDA as a "Phase III" trial and would satisfy the requirements of 21 C.F.R. § 312.21(c).

1.46 "Regulatory Approval". Regulatory Approval means the granting by the FDA or by a comparable Regulatory Authority of approval to market a pharmaceutical preparation or product in a country in the Territory.

1.47 "Regulatory Authority". Regulatory Authority means any Governmental Authority, including the FDA, EMEA or MHW, with responsibility for granting licenses or approvals (with the exception of price approvals) necessary for the marketing and sale of pharmaceutical preparations or products in any country.

1.48 "Sublicensee". Sublicensee means any Third Party granted a license or sublicense to Manufacture, have Manufactured, import, export, use, sell or offer for sale Licensed Products pursuant to Section 2.1(c). Third Parties that are permitted only to distribute and resell Licensed Products shall be considered Sublicensees only if such Third Parties are also responsible for marketing and promoting the applicable Licensed Productin the applicable country. Notwithstanding anything to the contrary in the foregoing, Third Parties that only (a) re-package a Licensed Product for resale or (b) Manufacture a Licensed Product for supply to TransTech or its Affiliates or Sublicensees (and have no other right to Develop or Commercialize such Licensed Product) are not Sublicensees. For the avoidance of doubt, nothing in this Section 1.48 shall limit TransTech's obligations under Section 3.2 below to engage a Commercialization Partner.

1.49 "Territory". Territory means all countries of the world.

1.50 "Third Party". Third Party means any Person other than TransTech or Novo or any of their respective Affiliates.

1.51 "TransTech Patent Rights". TransTech Patent Rights means all Patent Rights related to Compounds that are Controlled by TransTech as of the Effective Date or thereafter during the Term, including any Patent Rights included in the Reverting Rights.

1.52 "Valid Claim". Valid Claim means any claim from an issued and unexpired patent included within the TransTech Patent Rights or the Novo Patent Rights that has not been revoked or held unenforceable or invalid by a final decision of a court or other Governmental Authority of competent jurisdiction, and that has not been disclaimed, denied or admitted to be invalid or unenforceable through reissue or disclaimer or otherwise.

1.53 Additional Definitions. Each of the following definitions is set forth in the section of this Agreement indicated below:

Definition:	**Section:**
9.5 Deciding Bankers	Section 9.5(a)
Agents	Section 6.1
Agreement	Preamble
Applicable Fraction	Section 1.36(i)-(v)
Breach Issue	Recitals
Commercialization Agreement	Section 3.2(a)
Confidential Information	Section 6.2
Courts	Section 11.2

Deciding Bankers	Section 3.2(b)
Effective Date	Preamble
Effective Time	Section 9.5(b)
First Sales Date Estimate	Section 3.3
GK Statement	Recitals
Glucokinase Activator	Section 1.11
Indemnified Party	Section 8.3(a)
Indemnifying Party	Section 8.3(a)
Infringement Claim	Section 5.5
Invalidity Claim	Section 5.4
Novo	Preamble
Novo Parties	Section 8.2
Paragraph IV Claim	Section 5.3(a)
Partner Deadline	Section 3.2(a)
Product Liability	Section 8.1(c)(ii)(A)
Prosecution	Section 5.2(a)
Released Group	Section 10.1
Releasing Group	Section 10.1
Releasor	Section 10.1
Reverting Rights	Section 2.1(a)
Royalty Term	Section 4.2(c)
Stand-by License Agreement	Section 9.5(b)
Term	Section 9.1
Third-Party Claims	Section 8.1(c)
TransTech	Preamble
TransTech Parties	Section 8.1
Umbrella Agreement	Recitals

ARTICLE II
TRANSTECH RIGHTS

2.1 Reversions and Grants of Rights. Subject to all of the other terms and conditions of this Agreement, TransTech shall obtain the rights set forth in this Section 2.1 as of the Effective Date.

(a) Reversion of Grant from Umbrella Agreement. As of the Effective Date, all intellectual property and other rights previously licensed by TransTech to Novo pursuant to Section 7.1.1 or 7.1.2 of the Umbrella Agreement with respect to the GK Activator Project or pursuant tothe GK Statement (the "Reverting Rights") shall revert to TransTech.

(b) License Grant. As of the Effective Date, Novo shall grant to TransTech an exclusive (even as to Novo), royalty-bearing license, under the Novo Intellectual Property, to discover, Develop, Manufacture, have Manufactured, use and Commercialize in the Field in the Territory Licensed Products.

(c) Sublicenses. TransTech may grant to its Affiliates and to Third Parties sublicenses under the licenses granted under Section 2.1 (b) without Novo's separate approval but with written notice to Novo. For the avoidance of doubt, nothing in the foregoing sentence shall limitTransTech's obligations under Section 3.2 below to engage a Commercialization Partner.

2.2 Data and Material Transfer.

(a) Promptly following the Effective Date, Novo will transfer to TransTech Novo Materials and all data relating to the Novo Materials, including (i) all data relating to tests or trials conducted on or using Licensed Products and (ii) samples of Licensed Products and Compounds in accordance with the payment and other terms set forth on Exhibit F. Each Party will bear its own costs in connection with any such transfer, except that TransTech will reimburse Novo's reasonable and actually incurred out-of-pocket costs upon receipt of appropriate documentationwith respect to such costs.

(b) For a period of three (3) months following the Effective Date, Novo will supply reasonable transition assistance in order to permit TransTech to assume all responsibility for the GK Activator Project at the earliest practicable time, including without limitation reasonable access to Novo's personnel as available (through one or more contact Persons designated by Novo), and documents (so that TransTech may copy and retain all such documents) to the extent related to the GK Activator Project, a list of such documents being attached hereto as Exhibit B. Each Party will bear its own costs in connection with such transitional assistance, except that TransTech will reimburse Novo's reasonable and actually incurred out-of-pocket costs upon receipt of appropriate documentation with respect to such costs. Furthermore, Novo will complete at its sole expense, in cooperation with TransTech and in a manner consistent with professional practice, and make available to TransTech the data created by and the results of, all studies described in Exhibit C attached hereto arising out of the GK Activator Project that are ongoing as of the Effective Date. For the avoidance of doubt, theforegoing imposes an obligation on Novo to complete the studies listed in Exhibit C and finalize any associated study reports in a timely manner, which may exceed the three (3) month period mentioned above.

(c) Subject to all the other terms and conditions of this Agreement, Novo hereby grants to TransTech a non-exclusive, royalty-free license to Patent Rights and Know-How Controlled by Novo as of the Effective Date not otherwise licensed to TransTech pursuant to this Agreementthat are necessary to discover, Develop, Manufacture, have Manufactured, use and Commercialize Licensed Products in the Field in the Territory.

2.3 Rights Retained by the Parties. Any right of TransTech or Novo, as the case may be, not expressly granted to the other Party under this Agreement shall be retained by such Party.

2.4 Section 365(n) of the Bankruptcy Code. All rights and licenses granted under or pursuant to any Section of this Agreement, including under Section 2.1(b), 2.1(c) or 2.2(c), are rights to "intellectual property" (as defined in Section 101(35A) of the Bankruptcy Code). Each of TransTech and Novo hereby acknowledges that (a) copies of research data, (b) laboratory samples, (d) product samples, (d) formulas, (e) laboratory notes and notebooks, (f) data and results related to clinical trials, (g) regulatory filings and approvals, (h) rights of reference in respect of regulatory filings and approvals, (i) pre-clinical research data and results, and (j) marketing, advertising and promotional materials, in each case, that relate to suchintellectual property, constitute "embodiments" of such intellectual property pursuant to Section 365(n) of the Bankruptcy Code. Each Party shall retainand may fully exercise all of its rights and elections under the Bankruptcy Code or equivalent legislation in any other jurisdiction.

ARTICLE III
DEVELOPMENT, MANUFACTURE AND COMMERCIALIZATION

3.1 General. Except as set forth in Section 3.2, TransTech shall have sole and exclusive control, following the Effective Date, at its sole expense, of the discovery, Development, Regulatory Approval, Manufacture and Commercialization of Licensed Products in the Field in the Territory and TransTech (alone or through an Affiliate or Sublicensee) shall use commercially reasonable best efforts to Develop and obtain Regulatory Approval for at least one Licensed Product.

3.2 Commercialization Partner.

(a) TransTech shall use commercially reasonable best efforts to enter into, on or before the date (the "Partner Deadline") that is [***] prior to the earliest date on which TransTech expects to conclude the First Commercial Sale of such Licensed Product, one or more binding agreementsrequiring a Commercialization Partner to use commercially reasonable best efforts to Manufacture and Commercialize at least one Licensed Product inat least the Major Markets (each such agreement, a "Commercialization Agreement"). TransTech, in its sole discretion, shall determine the terms of any such Commercialization Agreement subject to the efforts requirements set forth in this subsection (a). At the start of negotiations with any potential Commercialization Partner, TransTech shall offer to Novo an opportunity to negotiate a Commercialization Agreement in good faith and on anon-exclusive basis, provided that TransTech, in its sole discretion, shall decide whether or not to enter into a Commercialization Agreement with Novo or any potential Commercialization Partner. Novo shall have one (1) month from the date of TransTech's offer to accept or reject such offer to negotiate a Commercialization Agreement.

(b) If TransTech has not entered into one or more Commercialization Agreement(s) covering all Major Markets on or before the Partner Deadline, TransTech shall offer Novo an opportunity to negotiate in good faith a Commercialization Agreement covering the remaining Major Markets or all Major Markets, as the case may be. Novo shall have one (1) month from the Partner Deadline to accept or reject, in writing, TransTech'soffer to negotiate in good faith a Commercialization Agreement. If (i) Novo elects to enter into such negotiations with TransTech and (ii) TransTech shall not have (A) concluded such a Commercialization Agreement with Novo within three (3) months after Novo provides notice of such election or
(B) received written notice from Novo within such three (3) month period of Novo's intent to terminate such negotiations, then TransTech and Novo shall retain three (3) mutually acceptable, internationally recognized investment banking firms at least one (1) of which shall be based in the European Union and at least one (1) of which shall be based in the United States (the "Deciding Bankers"), which Deciding Bankers shall each independently assess the facts and circumstances relating to the Commercialization of Licensed Products in the applicable Major Markets and recommend each majordeal term relating to such Commercialization Agreement. Novo and TransTech will, following the recommendations of the Deciding Bankers, be deemed to have concluded a Commercialization Agreement on terms equal to the average of the terms recommended by the Deciding Bankers, which Commercialization Agreement shall be binding upon and enforceable by the Parties.

(c) If Novo (i) does not elect to enter into negotiations with TransTech regarding a Commercialization Agreement after the Partner Deadline on or before the expiration of the one (1) month notice period set forth in subsection (b) above or (ii) terminates negotiations as described in Section 3.2(b)(ii)(B), then TransTech shall be free in its sole discretion to Manufacture and Commercialize Licensed Products either alone or with any other Person, shall not be considered to be in breach of its obligations under this Section 3.2 by not entering into a Commercialization Agreement, and shall have no further obligations under this Section 3.2.

3.3 Exchange of Information. TransTech will provide to Novo semi-annual written reports setting forth, in reasonable detail, information on TransTech's, or as applicable, its Affiliates' and their Sublicensees', Development and sales activities with respect to Licensed Products, which shall include, until such time as TransTech enters into one or more binding agreements with one or more Commercialization Partners, an estimate as to the earliest date on which TransTech expects to conclude the First Commercial Sale of a Licensed Product (the "First Sales Date Estimate"). In no event shall TransTech be deemed to be in breach of this Agreement for its failure to meet the First Sales Date Estimate described in any semi-annual report and the date of the Partner Deadline shall change with any change in the First Sales Date Estimate in accordance with the terms of Section 3.2.

ARTICLE IV FINANCIAL PROVISIONS

4.1 Milestone Payments.

(a) In General. Except as set forth in Section 4.1(b) or Section 4.3, TransTech shall make to Novo the non-refundable payments set forth below not later than ten (10) Business Days after the earliest date on which the corresponding milestone event for a Licensed Product set forth below first occurs:

	[***]	[***]
[***]		[***]
[***]		[***]
[***]		[***]
[***]		[***]
[***]		[***]
[***]		[***]
[***]		[***]
[***]		[***]
[***]		[***]
[***]		[***]
(xi)	Annual Net Sales first reach [***]	[***]
(xii)	Annual Net Sales first reach [***]	[***]
(xiii)	Annual Net Sales first reach [***]	[***]

(b) Limitations on Payments. Notwithstanding anything in Section 4.1(a) to the contrary, (i) each milestone payment set forth in Sections 4.1(a)(i)-(iii) shall be paid at most once, even if a particular Licensed Product shall achieve a milestone event more than once due to Development or Commercialization for other Indication(s) or more than one Licensed Product shall achieve the same milestone event, (ii) each milestone payment set forth in Sections 4.1(a)(iv)-(xiii) may be [***], and (iii) no Regulatory Approval milestone in any country shall be deemedachieved unless the Licensed Product shall have received all pricing and reimbursement approvals if such approvals are necessary to permit Commercial sales of the Licensed Product in such country.

(c) Payment in Cash or Stock. Notwithstanding anything in this Agreement to the contrary, TransTech may choose, in its sole discretion, to make the payments set forth in Sections 4.1(a)(iv)-(xiii) in cash (denominated in U.S. currency) or in TransTech equity securities, as longas, at the time of such payment, such securities publicly trade on any stock exchange or market and such securities would not be subject to any “lock- up” arrangement or other contractual arrangement prohibiting free transfer. If the payment is made in securities, the value of each such security, for purposes of this payment, shall be the average of the closing trading price for such security during the ten (10) trading days immediately prior to the date on which such milestone payment became due.

4.2 Product Royalties.

(a) In General. TransTech shall pay to Novo royalties on Net Sales to Third Parties (other than Sublicensees) of each Licensed Product in the Territory as follows:

Calendar Year Net Sales of the Licensed Product	Royalty Rate
Less than or equal to [***]	[***]
Greater than [***] and less than or equal to [***]	[***]
Greater than [***] and less than or equal to [***]	[***]
Greater than [***]	

(b) Applicability of Royalty Rates to Net Sales in the Territory. Royalties on aggregate Net Sales of any Licensed Product in the Territory in a Calendar Year shall be paid at the rate applicable to the portion of Net Sales within each of the Net Sales levels during such Calendar Year. [***].

(c) Royalty Term and Adjustments. TransTech's royalty obligations to Novo under this Section 4.2 shall commence on a country-by-country and Licensed Product-by-Licensed Product basis on the date of the First Commercial Sale of such Licensed Product in such country by TransTech, its Affiliates or Sublicensees to a Third Party that is not a Sublicensee and shall expire on a country-by-country and Licensed Product-by- Licensed Product basis on the later of: (i) the expiration of the Exclusivity Period in such country or (ii) the tenth (10th) anniversary of the date of the First Commercial Sale of such Licensed Product in such country by TransTech, its Affiliates or its Sublicensees (the "Royalty Term"); provided, however, that the royalty rates in the United States and Japan shall be deemed to be [***] of the rates set forth in Section 4.2(a) during any portion of the Royalty Term in which the Exclusivity Period has expired in such country. Licensed Products that comprise different pharmaceutical formulations of the same Compound shall be considered a single Licensed Product for purposes of determining the royalty rates set forth in Section 4.2(a).

4.3 Reports; Payments. Within sixty (60) days after the end of each Calendar Quarter during which there are Net Sales giving rise to a payment under Section 4.2, TransTech shall cause to be submitted to Novo a report, providing, with respect to each Licensed Product with Commercialsales, in reasonable detail an accounting of all Net Sales in each country in the Territory made during such Calendar Quarter. Concurrently with each such report, TransTech shall pay to Novo all royalties and sales milestones payable by it with respect to activities in such Calendar Quarter under Sections 4.1 and 4.2.

4.4 Books and Records; Audit Rights. TransTech shall keep complete and accurate records of the underlying revenue and expense data relating to the calculations of Net Sales and payments required by Sections 4.1 and 4.2. Novo shall have the right, once annually at its own expense, to have an independent, certified public accounting firm, selected by Novo and reasonably acceptable to TransTech, review any such records of TransTech in the location(s) where TransTech maintains such records upon reasonable notice (which shall be no less than fourteen (14) days prior written notice) and during regular business hours and under obligations of strict confidence, for the sole purpose of verifying the basis and accuracy of payments made under Sections 4.1 and 4.2 within the twenty-four (24) month period preceding the date of the request for review. The report of such accounting firm shall be limited to a certificate stating whether any report made or payment submitted by TransTech during such period is accurate or inaccurate and the actual amounts of Net Sales and royalties due for such period. TransTech shall receive a copy of each such report concurrently with receipt by Novo. Should such inspection lead to the discovery of a discrepancy to Novo's detriment, TransTech shall pay within five (5) Business Daysafter its receipt from the accounting firm of the certificate the amount of the discrepancy. Novo shall pay the full cost of the review unless the discrepancy is greater than ten percent (10%) to Novo's detriment, in which case TransTech shall pay the reasonable cost charged by such accounting firm for such review.

4.5 Taxes. Novo shall pay any and all taxes levied on account of all payments it receives under this Agreement. If Laws require that taxes be withheld, TransTech will (a) deduct those taxes from the remittable payment, (b) timely pay the taxes to the proper taxing authority, and (c) send proof of payment to Novo within thirty (30) days after receipt of confirmation of payment from the relevant taxing authority. TransTech will use commercially reasonable efforts to cooperate with Novo to obtain the benefit of any applicable tax Law or treaty, including the pursuit of any available refund or credit of such tax to Novo. Without limiting the generality of the foregoing, TransTech agrees that if Novo provides to TransTech aproperly completed IRS Form W-8BEN certifying that Novo is entitled to the benefits of the income tax treaty between the United States and Denmark, then TransTech will not withhold United States federal income taxes from the payments to be made hereunder by TransTech to Novo.

4.6 United States Dollars. All dollar ($) amounts specified in this Agreement are United States dollar amounts.

4.7 Currency Exchange. All payments to be made to Novo by TransTech shall be made by wire transfer of immediately available funds in United States Dollars, to a bank account designated by Novo able to receive United States Dollars. Royalty payments shall be converted to United States Dollars in accordance with the following: the rate of currency conversion shall be calculated using a simple average of mid-month and month-end rates as provided by Brown Brothers Harriman, 59 Wall Street, NY, NY 10005, for each relevant period or, if such rate is not available, thespot rate as published by The Wall Street Journal, Eastern Edition for such relevant period. The currency rates used shall be set forth in the report for that period provided by TransTech to Novo pursuant to Section 4.3.

4.8 Blocked Payments. If by reason of applicable Laws in any country in the Territory, it becomes illegal for TransTech or its Affiliates or Sublicensees to transfer, or have transferred on its behalf, milestones, royalties or other payments to Novo, TransTech shall promptly notify Novo of the conditions preventing such transfer and such royalties or other payments shall be deposited in local currency in the relevant countryto the credit of Novo in a recognized banking institution designated by Novo or, if none is designated by Novo within a period of thirty (30) days, in a recognized banking institution selected by TransTech or its Affiliate or Sublicensee, as the case may be, and identified in a notice given to Novo. If so deposited in a foreign country, TransTech shall provide, or cause its Affiliate or Sublicensee to provide, reasonable cooperation to Novo so as to allowNovo to assume control over such deposit as promptly as practicable.

4.9 Resolution of Disputes. If there is a dispute, claim or controversy relating to any financial obligation owed by one Party to the other Party pursuant to this Agreement, such Party shall provide the other Party with written notice setting forth in reasonable detail the nature and good-faith factual basis for such dispute, and the Parties shall seek to resolve such dispute amicably through senior, authorized representatives within twenty (20) Business Days after the date such other Party receives such written notice. Neither Party may allege a material breach of any provision of this Article IV until the amicable resolution period has closed. Notwithstanding any other provision of this Agreement to the contrary, neither Party shall be obligated to pay any amount that is reasonably disputed in good faith until such dispute is resolved hereunder, provided that (a) all amounts that are not in dispute shall be paid in accordance with the provisions of this Agreement and (b) any balance determined to be due shall be paid togetherwith applicable interest upon resolution of the dispute by agreement, by final judgment or by any other means legally binding on the Parties.

4.10 Novo Payment Obligations Terminated. As of the Effective Date, Novo shall have no obligation to make to TransTech any payment (milestone, royalty or otherwise) set out in the Umbrella Agreement with respect to the GK Activator Project or the GK Statement.

ARTICLE V
INTELLECTUAL PROPERTY OWNERSHIP, PROTECTION AND RELATED MATTERS

5.1 Ownership of Intellectual Property.

(a) Novo. Subject to Section 5.2(b), Novo shall retain its ownership rights to all Novo Intellectual Property.

(b) TransTech. TransTech shall own, free and clear of any claim by Novo except as otherwise expressly provided in this Agreement, the Reverting Rights and all rights with respect to inventions, Know-How and Patent Rights relating to or arising out of the GK Activator Project conceived following the Effective Date.

5.2 Prosecution and Maintenance of Patent Rights.

(a) TransTech Patent Rights. TransTech shall have the sole right to prepare, file, prosecute and maintain (such activities collectively, "Prosecution") rights in patents and applications it owns or, pursuant and subject to Section 5.1(b), otherwise controls.

(b) Novo Patent Rights. Novo shall have the first right to conduct, and TransTech shall cooperate with Novo with respect to, the Prosecution of all Novo Patent Rights. Novo shall promptly provide to TransTech all material correspondence received from any Governmental Authority relating to any such patent or application and shall permit to TransTech a reasonable opportunity to approve any proposed material action with respect to any such patent or application, such approval not to be unreasonably withheld. If Novo elects not to or does not Prosecute any such patent or application (or, after commencement of such Prosecution, elects to or does cease such Prosecution), then Novo shall notify TransTech of suchelection or cessation. Novo shall not abandon any Novo Patent Rights without at least sixty (60) days notice to TransTech. If TransTech elects to Prosecute such Novo Patent Rights, (i) Novo shall grant to TransTech an irrevocable power of attorney with respect to all such further Prosecution, which power may be exercised without further action on Novo's part; (ii) Novo shall cooperate reasonably, including by executing all documentation necessary or appropriate, to effectuate such power of attorney and to assign to TransTech such patent or application; (iii) TransTech shall, commencingon the date of such election or cessation, pay all costs associated with Prosecution and assignment of such patent or application; and (iv) such patent or application shall, following such assignment, no longer be deemed a Novo Patent Right, part of Exhibit A to this Agreement or otherwise be subject to any right of Novo under this Agreement.

5.3 Third Party Infringement.

(a) Notice. Each Party shall promptly report in writing to the other Party during the Term (i) any known or suspected infringement of, or challenge to, any of the Novo Patent Rights of which such Party becomes aware or (ii) any certification filed pursuant to either 21 U.S.C. § 355 (b)(2)(A) or § 355(j)(2)(A)(vii)(IV) or its successor provisions or any similar provision in a country in the Territory other than the United States (a "Paragraph IV Claim"), and shall provide the other Party with all available evidence supporting such known or suspected infringement or unauthorizeduse. For any of the notification obligations of the Parties under this Section 5.3(a), it is understood that all information disclosed under such obligation is covered by Article VI.

(b) Initial Right to Enforce. Subject to Section 5.3(c), TransTech shall have the first right to initiate suit or take other appropriate action that it believes is reasonably required to protect (*i.e.*, prevent or abate actual or threatened infringement or misappropriation of) or otherwise enforce the Novo Patent Rights, provided, however, that TransTech shall not have such first right with respect to the Novo Patent Rights unless TransTech shall pay all costs associated with such first right, including all costs associated with protecting the validity of such Novo Patent Rights tothe extent challenged by an alleged infringer or misappropriator. TransTech may not enter into any settlement or other voluntary final disposition of any action contemplated by this Section without Novo's prior written consent, which consent Novo shall not unreasonably condition, delay or withhold.

(c) Step-In Right. If TransTech fails to initiate a suit or take other appropriate action that it has the initial right to initiate or take pursuant to Section 5.3(b) within sixty (60) days after becoming aware of the basis for such suit or action, or, in the case that a Third Party files a Paragraph IV Claim, within twenty (20) days after receipt of the written notice pursuant to Section 5.3(a) or desires to cease to continue any such action to stop such infringement or fails to agree to be responsible for all associated costs as set forth in such Section, then Novo shall have the right toinitiate or continue a suit or take other appropriate action that it believes is reasonably required to protect the Novo Patent Rights.

(d) Conduct of Certain Actions; Costs. The Party initiating suit or other appropriate action or taking over continuance of such a suit or action pursuant to Section 5.3(c) shall have the sole and exclusive right to select counsel therefor. If required under applicable Law in order for the initiating Party to initiate and/or maintain any such suit, the other Party shall join as a party to the suit. Such other Party shall offer reasonable assistance to the initiating Party in connection therewith at no charge to the initiating Party except for reimbursement of reasonable out-of-pocket expenses incurred in rendering such assistance. The initiating Party shall assume and pay all of its own out-of-pocket costs incurred in connection with any litigation or proceedings initiated by it pursuant to Section 5.3(b) or 5.3(c), including the fees and expenses of the counsel selected by it. The other Party shall have the right to participate and be represented in any such suit by its own counsel at its own expense. The initiating Party shall keep the other Party reasonably informed of the progress of any legal action it initiates or conducts pursuant to Section 5.3(b) or 5.3(c).

(e) Recoveries. Any recovery obtained as a result of any suit or action initiated pursuant to Section 5.3(b) or 5.3(c) shall be paid to the Party initiating the suit, provided that:

(i) the Parties shall be reimbursed for all costs incurred in connection with such suit or action paid by the Parties and nototherwise recovered;

(ii) if TransTech initiated the suit or action, any recovery in the form of lost profits, reasonable royalties, and/or treble damages related to a Licensed Product awarded to TransTech in such suit or achieved through settlement of such suit that exceeds the total costs incurred by the Parties in (i) shall be subject to the royalty obligations set forth in Section 4.2 and any royalty payment pursuant to this Section 5.3(e) shall be due within thirty (30) days after TransTech receives payment of such recovery amount.

5.4 Patent Invalidity Claim. If a Third Party, including any Governmental Authority, at any time asserts a claim that any of the Novo Patent Rights is invalid or otherwise unenforceable (an "Invalidity Claim"), control of the response to such Invalidity Claim shall, as between the Parties, be determined in the same manner as enforcement rights are determined pursuant to Sections 5.3(b) and 5.3(c), with the time periods set forth in Section 5.3(c) shortened where necessary to provide the controlling Party sufficient time to respond without a loss of rights, and the non-controllingParty shall cooperate with the controlling Party in the preparation and formulation of such response, and in taking other steps reasonably necessary to respond, to such Invalidity Claim and the controlling Party shall keep the non-controlling Party reasonably informed of the progress of any response toan Invalidity Claim. The Party controlling the response to an Invalidity Claim may not settle or compromise such Invalidity Claim without the other Party's consent, which consent shall not be unreasonably conditioned, delayed or withheld.

5.5 Claimed Infringement. If a Party becomes aware of, or as of the Effective Date is aware of, any claim that the practice by either Party of Novo Patent Rights in the discovery, Development, Manufacture or Commercialization of any Licensed Product infringes the intellectual property rights of any Third Party (an "Infringement Claim"), such Party shall promptly notify the other Party in writing. In any such instance, the Parties shall cooperate and each Party shall provide to the other Party a copy of any notice it receives or has received from any Third Party regarding any patent nullity action, any declaratory judgment action or any alleged infringement or misappropriation of Third Party intellectual property relatingto the discovery, Development, Manufacture or Commercialization of any Licensed Product. Such notices shall be provided promptly, but in no event later than fifteen (15) days following receipt thereof or, with respect to notices received prior to the Effective Date, within fifteen (15) days after the Effective Date. The Party controlling the response to an Infringement Claim, which shall, as between the Parties, be determined in the same manner asenforcement rights are determined pursuant to Sections 5.3(b) and 5.3(c), shall keep the non-controlling Party reasonably informed of the progress of any response to an Infringement Claim and may not settle such Infringement Claim without the other Party's consent, which consent shall not be unreasonably conditioned, delayed or withheld.

5.6 Patent Term Extensions. The Parties shall cooperate, if necessary and appropriate, with each other in gaining patent term extensions (including those extensions available under the Supplementary Certificate of Protection of Member States of the European Union and other similar measures in any other country) wherever applicable to Patent Rights in the Territory Controlled by either Party that Cover a Licensed Product in the Field. All filings for such extensions shall be made by the Party Controlling such patent or responsible for the Prosecution of such Patent Rightsin accordance with Section 5.2(b), if different.

In countries where extensions of more than one patent may be obtained based on the Regulatory Approval of a single Licensed Product and a Novo Patent Right is a patent eligible for an extension in such countries, TransTech shall continue to pay royalties on Net Sales of Licensed Products insuch countries pursuant to Section 4.2 for the period during which the term of the Novo Patent Right is extended.

In countries where an extension of only one patent may be obtained based on the Regulatory Approval of a single Licensed Product and a Novo Patent Right and a TransTech Patent Right each Cover the Licensed Product or its method of use, the Parties shall decide which patent to seek anextension on as follows:

(a) If the Novo Patent Right and the TransTech Patent Right contain only the same types of claims (*e.g.*, both contain only method claims or both contain only product claims), then the Parties shall seek an extension for the patent whose extended term would run to the later date andif the extended Patent is a Novo Patent Right, then TransTech shall pay Novo royalties on Net Sales of Licensed Products in such countries pursuant toSection 4.2 taking into account the period by which the Novo Patent Right is extended;

(b) If the Novo Patent Right contains a product claim(s) and the TransTech Patent Right contains only method claims, then the Parties shall seek an extension for the Novo Patent Right and TransTech shall pay Novo royalties on Net Sales of Licensed Products in such countries pursuantto Section 4.2, taking into account the period by which the Novo Patent Right is extended; and

(c) If the TransTech Patent Right contains a product claim(s) and the Novo Patent Right contains only method claims, then the Parties shall seek an extension for the TransTech Patent Right and TransTech shall not owe Novo royalties on Net Sales of Licensed Products in suchcountries pursuant to Section 4.2 for the period by which the Novo Patent Right could have been extended.

ARTICLE VI CONFIDENTIAL INFORMATION

6.1 Treatment of Confidential Information.

(a) In General. During the Term and for five (5) years thereafter, each Party shall (i) maintain Confidential Information (as defined in Section 6.2) of the other Party in confidence, (ii) not disclose, divulge or otherwise communicate such Confidential Information to others (except for agents, directors, officers, employees, consultants, contractors, licensees, partners, investors, investors' representatives, Affiliates and advisors and potential agents, consultants, contractors, licensees, partners, investors, investors' representatives, acquirers, acquirers' representatives and advisors (collectively, "Agents") under obligations of confidentiality at least as stringent as those in this Agreement) or use it for any purpose other than in connection with (A) the discovery, Development, Manufacture or Commercialization of Licensed Products pursuant to this Agreement, including negotiations with potential Commercialization Partners, or (B) such Party's financing activities, corporate restructuring or sale, and (iii) exercise reasonable efforts to prevent and restrain the unauthorized disclosure of such Confidential Information by any of its Agents, which reasonable efforts shall be at least as diligent as those generally used by such Party in protecting its own confidential and proprietary information. Each Party will be responsible for a breach of this Article VI by its Agents.

(b) Permitted Exceptions. Notwithstanding the provisions of Section 6.1(a) to the contrary, (i) TransTech may disclose any Confidential Information of Novo that it deems reasonable or prudent in its sole discretion in order to obtain Regulatory Approval in any jurisdiction, subject to permitting a reasonable period for the Parties to file patent applications with respect to any invention to be publicly disclosed, (ii) TransTechmay disclose any Confidential Information of Novo to its Affiliates or any Third Party as it deems appropriate in its sole discretion in connection with the Development, Manufacture or Commercialization of Licensed Products, subject to confidentiality agreements with such Affiliates or Third Parties that contain conditions of confidentiality at least as stringent as those in this Agreement, (iii) either Party may disclose its own Confidential Information in connection with any proposed scientific publication, subject to permitting a reasonable period for the Parties to file patent applications with respect to any invention to be publicly disclosed, and (iv) either Party may disclose Confidential Information of the other Party it has received to the extent such information is required to be disclosed by such Party to comply with applicable Laws, to defend or prosecute litigation or to comply with the requirements of any stock exchange or market, provided that the receiving Party promptly provides prior notice of such disclosure to the otherParty and uses reasonable efforts to avoid or minimize the degree of such disclosure.

6.2 Confidential Information. "Confidential Information" means all trade secrets or other proprietary information, including any proprietary data and materials (whether or not patentable or protectable as a trade secret), regarding a Party's or its licensor's technology, products, business, financial status or prospects or objectives regarding the Licensed Products, which is disclosed by a Party to the other Party. All informationrelating to or disclosed in connection with the GK Activator Project and disclosed to the other Party prior to the Effective Date pursuant to the confidentiality provisions of the Umbrella Agreement (including the GK Statement) and the financial terms set forth in Sections 4.1 and 4.2 of this Agreement shall also be deemed "Confidential Information". Notwithstanding the foregoing, there shall be excluded from the foregoing definition ofConfidential Information any of the foregoing that:

(a) either before or after the date of the disclosure to the receiving Party is lawfully disclosed to the receiving Party by a Third Party without any violation of any obligation to the other Party;

(b) either before or after the date of the disclosure to the receiving Party, becomes published or generally known to the public throughno fault or omission on the part of the receiving Party or its Agents; or

(c) is independently developed by or for the receiving Party without reference to or reliance upon the Confidential Information as demonstrated by contemporaneous written records of the receiving Party.

ARTICLE VII REPRESENTATIONS AND WARRANTIES

7.1 TransTech's Representations. TransTech hereby represents and warrants as of the Effective Date as follows:

(a) TransTech has the corporate power and authority to execute and deliver this Agreement and to perform its obligations hereunder.The execution, delivery and performance of this Agreement has been duly and validly authorized and approved by proper corporate action on the part of TransTech. TransTech has taken all other action required by Law, its certificate of incorporation or by-laws or any agreement to which it is a party or by which it or its assets are bound, to authorize such execution, delivery and (subject to obtaining all necessary governmental approvals with respectto the discovery, Development, Manufacture or Commercialization of Licensed Products) performance. Assuming due authorization, execution and delivery on the part of Novo, this Agreement constitutes a legal, valid and binding obligation of TransTech, enforceable against TransTech in accordance with its terms.

(b) The execution and delivery of this Agreement by TransTech and the performance by TransTech contemplated hereunder will not violate (subject to obtaining all necessary governmental approvals with respect to the discovery, Development, Manufacture or Commercialization of Licensed Products) any United States Law or, to TransTech's Knowledge, any Law of any Governmental Authority outside the United States.

7.2 Novo's Representations.

(a) Novo hereby represents and warrants as of the Effective Date as follows:

(i) Novo has the corporate power and authority to execute and deliver this Agreement and to perform its obligations hereunder. The execution, delivery and performance of this Agreement has been duly and validly authorized and approved by proper corporate action on the part of Novo. Novo has taken all other action required by Law, its organizational documents or any agreement to which it is a party or by whichit or its assets are bound to authorize such execution, delivery and performance. Assuming due authorization, execution and delivery on the part of TransTech, this Agreement constitutes a legal, valid and binding obligation of Novo, enforceable against Novo in accordance with its terms.

(ii) The execution and delivery of this Agreement by Novo and the performance by Novo contemplated hereunder will not violate any United States or Denmark Law or, to Novo's Knowledge, any Law of any Governmental Authority outside the United States and Denmark.

(iii) Exhibit A to this Agreement includes all patents and applications relating to the Compounds Controlled by Novo as of the Effective Date.

(iv) To Novo's Knowledge, no Person (other than Novo) has any right, interest or claim in or to, and neither Novo nor any ofits Affiliates has entered into any agreement granting any right, interest or claim in or to, the Novo Patent Rights identified in Exhibit A or Novo Know-How, including any lien, encumbrance, charge, security interest, mortgage or similar restriction.

(v) Novo shall diligently seek to ensure that, no later than six (6) months following the Effective Date, each Novo employee or consultant who is an inventor of any invention claimed or that could be claimed in any Novo Patent Right identified in Exhibit A (A) has executed a valid and binding agreement with Novo specific to each such Novo Patent Right expressly assigning to Novo all of his or her right, title and interest to each such invention or (B) where such employee or consultant has refused to execute a valid and binding agreement with Novo specific to each such Novo Patent Right expressly assigning to Novo his or her right, title and interest in each such invention, that Novo has sought legal redress as permittedunder the laws of the relevant jurisdiction to compel the inventor to execute such assignment.

(vi) To Novo's Knowledge, there is no actual or alleged infringement of any trademark, Patent Right or other intellectual property right, or misappropriation of any trade secret, of any Person resulting from the Development, Manufacture or use of a Licensed Product priorto the Effective Date.

(b) If, at any time, either Party shall learn that the representation set forth in Section 7.2(a)(iii) is inaccurate, then, in addition to any other right or remedy that shall exist pursuant to applicable Law or the terms of this Agreement, the Parties shall deem Exhibit A to be amended to include each patent or application rendering such representation inaccurate. The Parties shall promptly execute any and all papers necessary or appropriate to effectuate the purpose of this Section 7.2(b).

(c) Upon TransTech's reasonable request from time to time, Novo shall (i) record any documents necessary to evidence its ownership interest in any Novo Patent Right and (ii) execute and file any notices and other filings with respect to the rights granted to TransTech underthis Agreement, in each case with the United States Patent and Trademark Office (or any successor agency) or any analogous agency in the Territory.

7.3 No Warranty. EXCEPT AS OTHERWISE EXPRESSLY SET FORTH IN THIS AGREEMENT, NEITHER PARTY MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING ANY REPRESENTATION OR WARRANTY CONCERNING WHETHER ANY LICENSED PRODUCT IS FIT FOR ANY PARTICULAR PURPOSE OR SAFE FOR HUMAN CONSUMPTION.

ARTICLE VIII
INDEMNIFICATION

8.1 Indemnification in Favor of TransTech. Novo shall indemnify, defend and hold harmless the TransTech Parties (as hereinafter defined) from and against any and all Losses incurred, suffered or sustained by any of the TransTech Parties or to which any of the TransTech Partiesbecomes subject, arising out of, relating to or resulting from:

(a) any misrepresentation or breach of any representation, warranty, covenant or agreement made by Novo in this Agreement; or

(b) any violation of the Act or any foreign similar Law by Novo; or

(c) any Third Party claim, action, suit, proceeding, liability or obligation (collectively, "Third-Party Claims") arising out of, relatingto or resulting from:

(i) any misrepresentation or breach of any representation, warranty, covenant or agreement made by Novo in this Agreement;

(ii) the Development, Manufacture or use prior to the Effective Date of a Licensed Product, including all Third-Party Claims involving death or bodily injury caused or allegedly caused by the use of a Licensed Product (any and all such Losses "Product Liability") prior to theEffective Date; or

(iii) the gross negligence or willful misconduct of any of the Novo Parties (as hereinafter defined) in connection with Novo'sperformance of this Agreement.

For purposes of this Article VIII, "TransTech Parties" means TransTech, its Affiliates and their respective agents, directors, officers,employees and shareholders.

The indemnification obligations set forth in this Section 8.1 shall not apply to the extent that any Loss is the result of a breach of thisAgreement by TransTech or, with respect to an individual indemnitee, the gross negligence or willful misconduct of such indemnitee.

8.2 Indemnification in Favor of Novo. TransTech shall indemnify, defend and hold harmless the Novo Parties (as hereinafter defined) from and against any and all Losses incurred, suffered or sustained by any of the Novo Parties or to which any of the Novo Parties becomes subject, arising out of, relating to or resulting from:

(a) any misrepresentation or breach of any representation, warranty, covenant or agreement made by TransTech in this Agreement; or

(b) any violation of the Act or any foreign similar Law by TransTech; or

(c) any Third-Party Claim arising out of, relating to or resulting from:

(i) any misrepresentation or breach of any representation, warranty, covenant or agreement made by TransTech in this Agreement; or

(ii) the Development, Manufacture, use or Commercialization from and after the Effective Date of a Licensed Product, including all Third Party Claims involving (A) Product Liability or (B) subject to Section 5.5, any actual or alleged infringement of any trademark,Patent Right or other intellectual property right, or misappropriation of any trade secret, of any Person; or

(iii) the gross negligence or willful misconduct of any of the TransTech Parties in connection with TransTech's performanceof its obligations under this Agreement.

For purposes of this Article VIII, "Novo Parties" means Novo, its Affiliates and their respective agents, directors, officers, employees andshareholders.

The indemnification obligations set forth in this Section 8.2 shall not apply to the extent that any Loss is the result of a breach of thisAgreement by Novo or, with respect to an individual indemnitee, the gross negligence or willful misconduct of such indemnitee.

8.3 General Indemnification Procedures.

(a) A Party seeking indemnification pursuant to this Article VIII (an "Indemnified Party") shall give prompt notice to the Party from whom such indemnification is sought (the "Indemnifying Party") of the commencement or assertion of any Third-Party Claim (which in no event includes any claim by any Novo Party or any TransTech Party) in respect of which indemnity may be sought hereunder, shall give the Indemnifying Party such information with respect to any indemnified matter as the Indemnifying Party may reasonably request, and shall not make any admission concerning any Third-Party Claim, unless such admission is required by applicable Law or legal process, including in response to questions presented in depositions or interrogatories. Any admission made by the Indemnified Party or the failure to give such notice shall relieve the Indemnifying Party of any liability hereunder only to the extent that the ability of the Indemnifying Party to defend such Third-Party Claim is prejudiced thereby (and no admission required by applicable Law or legal process shall be deemed to result in prejudice). The Indemnifying Party shall assume and conduct the defense of such Third-Party Claim, with counsel selected by the Indemnifying Party and reasonably acceptable to the Indemnified Party. Subject to theinitial and continuing satisfaction of the terms and conditions of this Article VIII, the Indemnifying Party shall have full control of such Third-Party Claim, including settlement negotiations and any legal proceedings. If the Indemnifying Party does not assume the defense of such Third-Party Claim in accordance with this Section 8.3, the Indemnified Party may defend the Third-Party Claim. If both Parties are Indemnifying Parties with respect to the same Third-Party Claim, the Parties shall determine by mutual agreement, within twenty (20) days following their receipt of notice of commencement or assertion of such Third-Party Claim (or such lesser period of time as may be required to respond properly to such claim), which Party shall assume the lead role in the defense thereof. Should the Parties be unable to mutually agree on which Party shall assume the lead role in the defense of such Third-Party Claim, both Parties shall be entitled to participate in such defense through counsel of their respective choosing.

(b) The Party not managing the defense of a Third-Party Claim shall have the right to participate in (but not control), at its own expense (subject to the immediately succeeding sentence), the defense. The Indemnifying Party shall not be liable for any litigation cost or expense incurred, without its consent, by the Indemnified Party where the action or proceeding is under the control of the Indemnifying Party; provided, however, that if the Indemnifying Party fails to take reasonable steps necessary to defend such Third-Party Claim, the Indemnified Party may assumeits own defense, and the Indemnifying Party will be liable for all reasonable costs or expenses paid or incurred in connection therewith.

(c) The Indemnifying Party shall not consent to a settlement of, or the entry of any judgment against the Indemnified Party arising from, any Third-Party Claim to the extent such Third-Party Claim involves equitable or other non-monetary relief from the Indemnified Party. No Party shall, without the prior written consent of the other Party, enter into any compromise or settlement that commits the other Party to take, or to forbear to take, any action.

(d) The Parties shall cooperate in the defense or prosecution of any Third-Party Claim and shall furnish such records, information and testimony, and attend such conferences, discovery proceedings, hearings, trials and appeals, as may be reasonably requested in connection therewith.

(e) Any indemnification hereunder shall be made net of any insurance proceeds actually recovered by the Indemnified Party from unaffiliated Third Parties; provided, however, that if, following the payment to the Indemnified Party of any amount under this Article VIII, such Indemnified Party recovers any such insurance proceeds in respect of the claim for which such indemnification payment was made, the Indemnified Party shall promptly pay an amount equal to the amount of such proceeds (but not exceeding the amount of such net indemnification payment) to theIndemnifying Party.

(f) The Parties agree and acknowledge that the provisions of this Article VIII represent the Indemnified Party's exclusive recourse with respect to any Losses for which indemnification is provided to the Indemnified Party under this Article VIII.

8.4 Insurance. During the Term and for a period of five (5) years thereafter, TransTech shall obtain or maintain, at its sole cost and expense, product liability insurance in amounts that are reasonable and customary in the pharmaceutical industry. Such product liability insurance shallinsure against all liability, including product liability and property damage arising out of the Development, Manufacture, use or Commercialization of Licensed Products in the Territory. Without limiting the generality of the foregoing, TransTech shall maintain comprehensive general liability insurance, including product liability insurance, to cover its activities and, unless its Affiliates and Sublicensees maintain comparable coverage, the activities of its Affiliates and Sublicensees, with respect to Licensed Products. TransTech will provide satisfactory evidence of adequate insurance coverage to Novo upon the request of Novo.

ARTICLE IX
TERM AND TERMINATION

9.1 Term. The term of this Agreement (the "Term") shall commence on the Effective Date and, unless earlier terminated as provided in this Article IX, shall continue in full force and effect, on a country-by-country and Licensed Product-by-Licensed Product basis until there is no remaining royalty with respect to such Licensed Product, at which time this Agreement shall expire in its entirety with respect to such Licensed Productin such country. The Term shall expire on the date this Agreement has expired with respect to all Licensed Products in all countries in the Territory, and from that time forward TransTech shall have a fully paid-up license under the Novo Intellectual Property.

9.2 Termination for Cause.

(a) In the event of a material breach of this Agreement by a Party, the other Party may give the Party in default written notice requiring it to cure such default. If such material breach is not cured within sixty (60) days after receipt of such notice, the notifying Party shall be entitled (without prejudice to its other rights under this Agreement or applicable Law) to terminate this Agreement by giving written notice to the defaulting Party, with such termination to take effect immediately. The right of either Party to terminate this Agreement as set forth in this Section 9.2 shall not be affected in any way by its waiver of, or failure to take action with respect to, any previous default.

(b) In the event of a material breach of this Agreement by TransTech, each Commercialization Partner shall be permitted, in all respects, the opportunity to cure any such material breach by TransTech within the cure period set forth in Section 9.2(a), and Novo shall accept anysuch cure by any Commercialization Partner on TransTech's behalf.

9.3 Termination for Insolvency. This Agreement may be terminated by Novo upon written notice to TransTech if (a) TransTech shall make an assignment for the benefit of its creditors, file a petition in bankruptcy, petition or apply to any tribunal for the appointment of a custodian, receiver or trustee for it or a substantial part of its assets, or shall commence any proceeding under any bankruptcy, reorganization, readjustment of debt, dissolution or liquidation Law of any jurisdiction, whether now or hereafter in effect; or (b) if there shall have been filed against TransTech any such bona fide petition or application, or any such proceeding shall have been commenced against it, in which an order for relief is entered or that remains undismissed or unstayed for a period of ninety (90) days or more; or (c) if TransTech by any act or omission shall indicate its consent to, approval of or acquiescence in any such petition, application or proceeding or order for relief or the appointment of a custodian, receiver or trustee forit or any substantial part of its assets, or shall suffer any such custodianship, receivership or trusteeship to continue undischarged or unstayed for a period of ninety (90) days or more. Termination shall be effective upon the date specified in such notice.

9.4 Termination for Patent Challenge. If, at any time during the Term, TransTech opposes, or assists any Third Party to oppose, the grant of any letters patent within the Novo Patent Rights, or disputes, or assists any Third Party to dispute, the validity of any patent within the NovoPatent Rights, or any of the claims thereof, Novo may, in its sole discretion, terminate all or any portion of this Agreement, including the license granted under Section 2.1(b) hereof, upon thirty (30) days prior written notice thereof to TransTech.

9.5 Consequences of Terminations by the Parties.

(a) If this Agreement is terminated by Novo in accordance with Section 9.2, 9.3 or 9.4 hereof, any and all rights granted by Novo to TransTech under this Agreement, including the license granted pursuant to Section 2.1(b) and the Novo Materials and data related to the Novo Materials transferred to TransTech under Section 2.2(a), will automatically and immediately revert to Novo, provided that Novo shall pay royalties to TransTech as set forth in Section 4.2 (with all references therein, and in all defined terms used therein, to "Novo" replaced with "TransTech" and vice versa), reduced by fifty percent (50%), provided further that Novo shall have no obligation to pay any royalty for any Licensed Product in any country in the Territory (i) if TransTech's breach has materially diminished the value of the Novo Know-How that was embodied in such Licensed Product, (ii)in which TransTech's breach has materially diminished the value of the Novo Patent Rights that Covered such Licensed Product in such country or (iii)if the Licensed Product is being sold by a Commercialization Partner who has been granted a license under 9.5(b) to Commercialize such Licensed Product in such country. Consequently, TransTech will no longer be entitled to use or rely on any such rights, data and/or Novo Materials, be it in whole or in part. For the avoidance of doubt, upon any termination by Novo in accordance with Section 9.2, 9.3 or 9.4 hereof, Novo shall be entitled to retain any sum already paid by TransTech to Novo and TransTech shall pay to Novo all milestones, royalties or other payments required by this Agreement and accrued prior to such termination. Notwithstanding anything in this Section 9.5(a) to the contrary, if (A) if rights granted by Novo to TransTech under this Agreement revert to Novo pursuant to this Section 9.5(a) and (B) it is necessary for Novo to obtain a license under TransTech Patent Rights in order to Develop, Manufacture or Commercialize a Licensed Product that a Commercialization Partner is not Manufacturing or Commercializing under a license granted pursuant to Section 9.5(b), then TransTech shall grant to Novo a royalty-bearing license under such TransTech Patent Rights to Develop, Manufacture or Commercialize such Licensed Product on financial terms to be negotiated in good faith by the Parties, provided that if the Parties have not agreed on the financial terms of such license within one (1) month after any termination by Novo of this Agreement in accordance with Section 9.2, 9.3 or 9.4 hereof, then TransTech and Novo shall retain three (3) mutually acceptable, internationally recognized investment banking firms (the "9.5 Deciding Bankers"), which 9.5 Deciding Bankers shall each independently assess the facts and circumstances relating to the licensing of such TransTech Patent Rights and recommend the financial terms relating to such license. Novo and TransTech will, following the recommendations of the 9.5 Deciding Bankers, be bound to financial terms with respect to such TransTech Patent Rightsequal to the average of the financial terms recommended by the 9.5 Deciding Bankers.

(b) If at any time this Agreement terminates and, as a result of such termination, the rights and licenses granted by Novo to TransTech under Article II terminate (the effective time of such terminations, the "Effective Time"), Novo hereby grants to each Commercialization Partner all rights and licenses of a scope commensurate with the scope of the sublicense granted by TransTech to such Commercialization Partner in accordance with this Agreement, effective as of the Effective Time, subject to the same terms and conditions such rights and licenses were granted to TransTech under this Agreement immediately prior to the Effective Time, without any need for further action by Novo or any Commercialization Partner (such grant by Novo to a Commercialization Partner, the "Stand-by License Agreement"); provided that, as of such Effective Time, (i) the Commercialization Partner is not in material default of its obligations under its sublicense agreement with TransTech and (ii) such Commercialization Partner shall not have caused, in any direct and material way or in any indirect way involving knowing and deliberate actions by such Commercialization Partner, any material default under this Agreement, including lack of commercially reasonable best efforts under Section 3.2(a) by the Commercialization Partner, that is a basis for any such termination; provided further that the Stand-by License Agreement shall terminate if (A) thebasis for Novo's termination of this Agreement was a material breach by TransTech of TransTech's payment obligations under Section 4.2 of this Agreement, (B) at or after the Effective Time Novo gives such Commercialization Partner written notice of the portion of such overdue amounts relating to Net Sales of Licensed Products in the portion of the Territory for which the Commercialization Partner has a license to Commercialize Licensed Products under its sublicense with TransTech and (C) such Commercialization Partner fails to pay within thirty (30) business days after such notice such portion of such overdue amounts owed by TransTech to Novo. Following the Effective Time, each Commercialization Partner's payment obligations under the Stand-by License Agreement shall be the same as TransTech's payment obligations would have been hereunder if this Agreementhad remained in effect and TransTech's activities hereunder had been the same as those of such Commercialization Partner under the Stand-by LicenseAgreement.

(c) If TransTech is entitled to terminate this Agreement in accordance with Section 9.2 hereof, TransTech may elect one of the following options:

(i) TransTech may terminate this Agreement in its entirety and any and all rights granted by Novo to TransTech under thisAgreement, including the license granted pursuant to Section 2.1(b) and the Novo Materials and data related to the Novo Materials transferred to TransTech under Section 2.2(a), will automatically and immediately revert to Novo; or

(ii) TransTech may terminate this Agreement in its entirety except that the rights and licenses granted by Novo to TransTechunder Article II shall survive, provided that TransTech (A) does not challenge the Novo Patent Rights for the term of TransTech's license to such Patent Rights and (B) continues to pay royalties as set forth in Section 4.2, reduced by fifty percent (50%), provided further that TransTech shall have no obligation to pay any royalty for any Licensed Product in any country in the Territory (1) if Novo's breach has materially diminished the value of the Novo Know-How that was embodied in such Licensed Product or (2) in which Novo's breach has materially diminished the value of the Novo Patent Rights that Covered such Licensed Product in such country.

9.6 Effect of Termination or Expiration; Accrued Rights and Obligations. Termination or expiration of this Agreement for any reason shall not release either Party from any liability that, at the time of such termination or expiration, has already accrued or that is attributable to a period prior to such termination or expiration nor preclude either Party from pursuing any right or remedy it may have hereunder or at Law or in equity with respect to any breach of this Agreement. It is understood and agreed that monetary damages may not be a sufficient remedy for any breach of this Agreement and that the non-breaching Party may be entitled to seek injunctive relief as a remedy for any such breach without the need to post bond orany other security.

9.7 Survival. The rights and obligations set forth in this Agreement shall extend beyond the Term or termination of this Agreement only to the extent expressly provided for in this Agreement or to the extent required to give effect to a termination of this Agreement or the consequences of a termination of this Agreement as expressly provided for in this Agreement. Without limiting the generality of the foregoing, it is agreed that the provisions of ARTICLE I (as applicable), Sections 2.1(a), 2.3, 4.4, 4.9, 4.10 and 5.1, ARTICLE VI, ARTICLE VII, ARTICLE VIII, Sections 9.5, 9.6 and 9.7, ARTICLE X and Sections 11.1, 11.2, 11.4, 11.5, 11.6, 11.7, 11.9, 11.13, 11.15, 11.16 and 11.17 shall survive expiration ortermination of this Agreement for any reason.

ARTICLE X RELEASES OF BREACH ISSUE

10.1 Grant of Release. Each Party (for purposes of this Article X, the "Releasor"), affirming that it has all requisite legal capacity to give this release on behalf of itself and its Affiliates and the employees, agents, principals, officers and directors of each of them (collectively, the "Releasing Group"), hereby releases and holds harmless, now and forever, the other Party, its Affiliates and the employees, agents, principals, officers and directors of each of them (collectively, the "Released Group") from, and waives any claim that any Person in the Releasing Group has presently, may have or have had in the past, known or unknown, against any Person in the Released Group in relation to any matter arising from the Umbrella Agreement and the GK Statement upon or by reason of, any matter, cause or thing whatsoever from the beginning of the world to the Effective Date, including any claim relating to or arising out of the Breach Issue or the facts and circumstances giving rise to the Breach Issue. It is the intention of the Releasing Group that the foregoing release shall be effective as a bar to all claims of whatever character, nature or kind, known or unknown, suspected or unsuspected, including without limitation those relating to the Breach Issue.

10.2 Sole Judgment. The Releasor represents and warrants that, in entering into the release set forth in Section 10.1, it has relied solely on its own judgment, belief and knowledge and has consulted or had the opportunity to consult its own independent counsel concerning the nature, extent and duration of its rights and claims. Further, the Releasor has not been influenced to any extent whatsoever in executing this Release by any representation or warranty made or allegedly made by the Released Group concerning any matter relating to this Release, except the representations and warranties set forth in this Section 10.2.

10.3 No Assignment. The Releasor represents and warrants that no one in the Releasing Group has assigned, transferred or granted any claim, right, demand or cause of action intended to be released by this Release.

ARTICLE XI MISCELLANEOUS

11.1 Governing Law. This Agreement shall be governed by and interpreted in accordance with the internal Laws of the State of New York, USA, without regard to its conflicts of laws rules.

11.2 Jurisdiction. Each Party (a) irrevocably submits to the exclusive jurisdiction in the United States District Court for the Southern District of New York and any state court sitting in New York County, New York, USA (collectively, the "Courts"), for purposes of any action, suit orother proceeding arising out of this Agreement, and (b) agrees not to raise any objection at any time to the laying or maintaining of the venue of any such action, suit or proceeding in the Courts, irrevocably waives any claim that such action, suit or other proceeding has been brought in an inconvenient forum and further irrevocably waives the right to object, with respect to such action, suit or other proceeding, that such Courts do not have any jurisdiction over such Party. Either Party may serve any process required by such Courts by way of notice under this Agreement.

11.3 Waiver. Waiver by a Party of the other Party's material breach of any provision of this Agreement shall not be construed as a waiver of any succeeding breach of the same or any other provision. No delay or omission by a Party to exercise or avail itself of any right, power or privilege that it has or may have under this Agreement shall operate as such Party's waiver of any right, power or privilege. No waiver shall be effective unless made in writing with specific reference to the relevant provision(s) of this Agreement and signed by a duly authorized representative ofthe Party granting the waiver.

11.4 Notices. All notices, instructions and other communications hereunder or in connection herewith shall be in writing, shall be sent to the address specified in this Section 11.4 and shall be: (a) delivered personally; (b) sent by registered or certified mail, return receipt requested, postageprepaid; (c) sent via a reputable international overnight courier service; or (d) sent by facsimile transmission. Any such notice, instruction or communication shall be deemed to have been delivered upon receipt if delivered by hand, three (3) Business Days after it is sent by registered or certified mail, return receipt requested, postage prepaid, one (1) Business Day after it is sent via a reputable international overnight courier service, or when transmitted with electronic confirmation of receipt, if transmitted by facsimile (if such transmission is on a Business Day; otherwise, on the next Business Day following such transmission).

Notices to Novo shall be addressed to:

Novo Nordisk A/S
Novo Allé
DK-2880 Bagsvaerd
Denmark
Attention: Chief Science Officer
Facsimile: +45 4442 7280

with a copy to:

Novo Nordisk A/S
Novo Allé
DK-2880 Bagsvaerd
Denmark
Attention: General Counsel
Facsimile: +45 4442 4135

Notices to TransTech shall be addressed to:

TransTech Pharma, Inc.
4170 Mendenhall Oaks Parkway High
Point, NC 27265, USA Attention:
Chief Executive OfficerFacsimile:
(336) 841-0333

with a copy to:

TransTech Pharma, Inc.
4170 Mendenhall Oaks Parkway
High Point, NC 27265, USA
Attention: Office of Senior Vice President – Legal Affairs
Facsimile: (336) 841-0333

Either Party may change its notice address by giving notice to the other Party.

11.5 Entire Agreement. This Agreement contains the complete understanding of the Parties with respect to the discovery, Development, Manufacture, use and Commercialization of Licensed Products and supersedes all prior understandings and writings relating to such subject matter, including the Umbrella Agreement and the GK Statement, which, together with that certain Confidential Disclosure Agreement between Novo and TransTech dated January 31, 2007, and all provisions referenced in Sections 13.6.3, 13.6.4 and 13.6.5 of the Umbrella Agreement as surviving termination thereof, shall terminate as of the Effective Date and be of no further force and effect. In particular, and without limitation, this Agreement supersedes and replaces any and all term sheets relating to the transactions contemplated by this Agreement and exchanged between the Parties prior tothe Effective Date.

11.6 Headings. Headings in this Agreement are for convenience of reference only and shall not be considered in construing this Agreement.

11.7 Severability. If any provision of this Agreement is held unenforceable by a court or tribunal of competent jurisdiction because it is invalid or conflicts with any Law of any relevant jurisdiction, the validity of the remaining provisions shall not be affected. In such event, the Parties shall negotiate a substitute provision that, to the extent possible, accomplishes the original business purpose.

11.8 Registration and Filing of the Agreement. To the extent, if any, that a Party concludes in good faith that it is required to file or register this Agreement or a notification thereof with any Governmental Authority, including the U.S. Securities and Exchange Commission, in accordance with applicable Laws, such Party may do so. The other Party shall cooperate in such filing or notification and shall execute all documents reasonably required in connection therewith. In such situation, the Parties will request confidential treatment of sensitive provisions of this Agreement,to the extent permitted by Law. The Parties shall promptly inform each other as to the activities or inquiries of any such Governmental Authority relating to this Agreement, and shall cooperate to respond to any request for further information therefrom.

11.9 Assignment. Either Party may assign its rights and obligations under this Agreement to any Affiliate, provided such assigning Party continues to be fully liable for its Affiliate’s prompt fulfillment of any obligations so assigned. Neither Party may assign this Agreement to any Third Party without the written consent of the other Party, which consent shall not be unreasonably conditioned, delayed or withheld; except either Party mayassign this Agreement, without such consent, to an entity that acquires all or substantially all of its assets relating to the subject matter of this Agreement, whether by merger, reorganization, acquisition, sale, or otherwise, always provided that the assignee successor shall not be entitled to exercise any rights or receive any benefits under this Agreement until it has expressly assumed in writing to the other Party the performance and observance of all the assigning Party’s duties and obligations as set forth in this Agreement. This Agreement shall be binding upon and inure to the benefit of the Parties and their successors and permitted assigns. Any assignment in violation of this Agreement shall be void and of no effect.

11.10 Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be deemed an original but all ofwhich together shall constitute one and the same instrument.

11.11 Force Majeure. No Party shall be liable for failure of or delay in performing obligations set forth in this Agreement, and no Partyshall be deemed in breach of its obligations, if such failure or delay is due to a natural disaster or any cause reasonably beyond the control of such Party.

11.12 Press Releases and Other Disclosures. The Parties will cooperate in the distribution of the initial press release relating to this Agreement set forth in Exhibit D to this Agreement. Except as expressly permitted under this Section or required by Law, neither Party will make any public announcement of any information regarding this Agreement either directly or indirectly, without first obtaining the written approval of the other Party; provided, however, that TransTech may make a public announcement of or otherwise disclose the results of any clinical trial relating to LicensedProducts without first obtaining the written approval of Novo. Once any public statement or disclosure has been approved in accordance with this Section, then either Party may appropriately communicate information contained in such permitted statement or disclosure. Notwithstanding the foregoing provisions of this Section 11.12 or Article VI, a Party may disclose the existence and terms of the this Agreement (a) where required, as reasonably determined by the disclosing Party, by applicable Law, by applicable stock exchange regulation or by order or other ruling of a competent court or (b) under obligations of confidentiality as least as stringent as those set forth in this Agreement, to agents, directors, officers, employees, consultants, contractors, licensees, partners, investors, investors' representatives, acquirers, acquirer's representatives and advisors, and to potential agents, consultants, contractors, licensees, partners, investors, investors' representatives, acquirers, acquirer's representatives and advisors, in connection with (i) the discovery, Development, Manufacture or Commercialization of Licensed Products pursuant to this Agreement, including negotiations with potential Commercialization Partners or (ii) such Party's financing activities, corporate restructuring or sale.

11.13 Third-Party Beneficiaries. None of the provisions of this Agreement shall be for the benefit of or enforceable by any Third Party other than an indemnitee under Article VIII. No such Third Party shall obtain any right under any provision of this Agreement or shall by reason of anysuch provision make any claim in respect of any debt, liability or obligation (or otherwise) against either Party.

11.14 Relationship of the Parties. No employee or representative of a Party shall have any authority to bind or obligate the other Party forany sum or in any manner whatsoever, or to create or impose any contractual or other liability on the other Party, except as expressly set forth in Articles V and VIII. For all purposes, and notwithstanding any other provision of this Agreement to the contrary, the legal relationship under this Agreement of each Party to the other Party shall be that of independent contractor. Nothing in this Agreement shall be construed to establish a relationship of partners or joint venturers between the Parties.

11.15 Performance by Affiliates. To the extent that this Agreement imposes obligations on Affiliates of a Party, such Party agrees to cause its Affiliates to perform such obligations.

11.16 Construction. Each Party acknowledges that it has been advised by counsel during the course of negotiation of this Agreement, and, therefore, that this Agreement shall be interpreted without regard to any presumption or rule requiring construction against the Party causing this Agreement to be drafted. Any reference in this Agreement to an Article, Section, subsection, paragraph or clause shall be deemed to be a reference to such Article, Section, subsection, paragraph or clause of or to, as the case may be, this Agreement. Except where the context otherwise requires, (a) wherever used, the use of any gender will be applicable to all genders, (b) the word "or" is used in the inclusive sense (and/or), (c) any definition of or reference to any agreement, instrument or other document refers to such agreement, instrument other document as from time to time amended, supplemented or otherwise modified (subject to any restrictions on such amendments, supplements or modifications set forth herein or therein), (d) anyreference to any Laws refers to such Laws as from time to time enacted, repealed or amended, (e) the words "herein", "hereof" and hereunder", and words of similar import, refer to this Agreement in its entirety and not to any particular provision hereof, (f) the words "include", "includes" and "including" shall be deemed to be followed by the phrase "but not limited to", "without limitation" or words of similar import.

11.17 No Consequential or Punitive Damages. NEITHER PARTY HERETO WILL BE LIABLE FOR INDIRECT, INCIDENTAL, CONSEQUENTIAL, SPECIAL, EXEMPLARY OR PUNITIVE DAMAGES, INCLUDING LOST PROFITS, ARISING FROM OR RELATING TO THIS AGREEMENT, REGARDLESS OF ANY NOTICE OF SUCH DAMAGES. NOTHING IN THIS SECTION 11.17 IS INTENDED TO LIMIT OR RESTRICT THE INDEMNIFICATION RIGHTS OR OBLIGATIONS OF EITHER PARTY UNDER THIS AGREEMENT WITH RESPECT TO THIRD-PARTY CLAIMS, OR WITH RESPECT TO THE INFRINGEMENT OR MISAPPROPRIATION OF THE OTHER PARTY'S INTELLECTUAL PROPERTY RIGHTS OR CONFIDENTIAL INFORMATION.

IN WITNESS WHEREOF, the Parties have signed this Agreement as of the Effective Date.

NOVO NORDISK A/S	**TRANSTECH PHARMA, INC.**
By: Name: /s/ Mads Krogsgaard Thomsen Mads Krogsgaard Thomsen Title: Executive Vice President, CSO	By: /s/ Adnan Mjalli Name: Adnan Mjalli Title: President, CEO

EXHIBIT A

NN Case Ref.	Country Code	App. No.	Earliest Priority Date	Filing Date	Pub. No.	Inventor(s)	Assignees	Title of App.	STATUS
6449	US	60/386,185	-	12/21/01	-				Abandoned 12/21/02
6449	EP	2002388015.6	-	02/19/02	1336607				Withdrawn 09/24/04
6449	PCT	PCT/DK02/00880	12/21/01	12/19/02	WO 03/055482	Andrews, R.C. Guzel, M. Kodra, J.T. Lau, J. Mjalli, A.M.M. Polisetti, D.R. Santhosh, K.C.		Amide Derivatives GK Activators	Entered National Phase
6449	AU			12/19/02	2002351748				Active
6449	BR			12/19/02	200215212				Active
6449	CA	2471049		12/19/02					Active
6449	CN	02827501.2		12/19/02					Active
6449	CZ			12/19/02	200400747				Active
6449	EPO	02787463.5		12/19/02	1458382				Active
6449	HU			12/19/02	200402309				Active
6449	IL	162620		12/19/02					Active
6449	IN			12/19/02	200401371				Active

6449	JP	2003556060		12/19/02	2005518391		Active
6449	KR(South)			12/19/02	2004-7009841		Active
6449	MX			12/19/02	2004006048		Active
6449	NO			12/19/02	200403116		Active
6449	PL	370989		12/19/02			Active
6449	RU			12/19/02	2004122407		Active
6449	TW	92100480		12/19/02	200303207		Active
6449	UA			12/19/02	20040604430		Active
6449	US	10/323,290		12/19/02	20030171411	Novo Nordisk A/S	Active
6449	ZA			12/19/02	20044521		Active
6511	DK	2003 00286	-	02/25/03			
6511	US	60/394,144	-	07/03/02			Abandoned 07/03/03
6511	DK	2002 00999	-	06/27/02			

EXHIBIT A *(cont'd)*

NN Case Ref.	Country Code	App. No.	Earliest Priority Date	Filing Date	Pub. No.	Inventor(s)	Assignees	Title of App.	STATUS
6511	US	60/452,228	-	03/05/03					Abandoned 03/05/04
6511	PCT	PCT/DK03/00449	6/27/02	6/27/03	WO 04/002481	Andrews R.C. Ankersen M. Bloch P. Blume N. Guzel M. Jeppesen L. Kodra J.T. Lau J. Mjalli A.M.M. Murray A.N. Polisetti D.R. Santhosh K.C. Subramaniam G. Valcarce-Lopez M.C. Vedso P.		Aryl Carbonyl Derivatives as Therapeutic Agents	Entered National Phase
6511	AU			6/27/03	2003243921				Active
6511	BR			6/27/03	200312023				Active
6511	CA	2488642		6/27/03					Active
6511	CN	03820170.4		6/27/03	1678311				Active
6511	EP	03761446.8		6/27/03	1531815				Active
6511	IL	165532		6/27/03					Active
6511	IN			6/27/03	200402911				Active
6511	JP	2004548878		6/27/03	2005537333				Active
6511	KR(South)	20047021359		6/27/03	2005019801				Active
6511	MX			6/27/03	2005000130				Active
6511	NO			6/27/03	200500426				Active
6511	PL	374920		6/27/03					Active
6511	RU			6/27/03	2005101880				Active
6511	US	11/365,534		6/27/03	20060183783		No Assignment Recorded		Active
6511	US	10/679,887		6/27/03	20040122235		Novo Nordisk A/S		Allowance Pending
6511	ZA				200500766				Active
6694	EP	2003388079.0			1532980				Withdrawn 07/13/06

EXHIBIT A *(cont'd)*

NN Case Ref.	Country Code	App. No.	Earliest Priority Date	Filing Date	Pub. No.	Inventor(s)	Assignees	Title of App.	STATUS
6694	PCT		1/24/03	11/24/04	WO 05/049019	Andrews R.C. Ankersen M. Christen D.P. Jeppesen L. Kodra J.T. Lau J.F. Mjalli A.M.M. Murray A. Polisetti D.R. Subramanian G. Vedso P.		N-Heteroaryl Indole Carboxamides and Analogues Thereof, for use as Glucokinase Activators in the Treatment of Diabetes	Entered National Phase
6694	EP	04797475.3		11/24/04	1689392				Active
6694	JP			11/24/04	2006540176				Active
6694	US	11/439,820		11/24/04	20070027140		Novo Nordisk A/S		Active
6808	DK	2004 00013							
6808	DK	2004 01272							
6808	DK	2004 01897							
6808	PCT	PCT/DK05/00002	1/6/04	1/6/05	WO 05/066145	Andrews R.C. Ankersen M. Christen D.P. Cooper J.T. Jeppesen L. Kristiansen M. Lau J. Lundbeck J.M. Murray A. Polisetti D.R. Santhosh K.C. Subramanian G. Valcarce-Lopez M.C. Vedso P.		Heteroaryl-Ureas and Their Use as Glucokinase Activators	Entered National Phase
6808	AU			1/6/05	2005203930				Active
6808	BR	PI05066662-0		1/6/05					Active
6808	CA	2551324		1/6/05					Active
6808	CN	200580002021.6		1/6/05					Active
6808	EP	05700554.8		1/6/05	1723128				Active
6808	IL	176257		1/6/05					Active
6808	IN	3624/DELNP/2006		1/6/05					Active
6808	JP			1/6/05	2006548114				Active
6808	KR(South)	10-2006-7013454		1/6/05					Active
6808	MX	PA/a/2006/00766		1/6/05					Active
6808	NO			1/6/05	200603351				Active
6808	RU			1/6/05	2006122209				Active

EXHIBIT A *(cont'd)*

NN Case Ref.	Country Code	App. No.	Earliest Priority Date	Filing Date	Pub. No.	Inventor(s)	Assignees	Title of App.	STATUS
6808	US	11/453,330		1/6/05					Active
6808	ZA			1/6/05	200605467				Active
6833	DK	2004939A20040617							
6833	PCT		6/17/04		WO 05/123132	Arkhammar P.O.G. Boedvarsdottir T.B. Fosgerau K. Larsen M.O. Varcarce-Lopez C. Wahl P.		Use of Liver Selective Glucose Activators	
6833	EP			6/17/05					Active
6833	JP			6/17/05					Active
6833	US	11/629,711		6/17/05					Active
6937	DK	2004 01888							
6937	PCT		12/3/04	12/5/05	WO 06/058923	Jeppesen L. Kristiansen M.		Heteroaromatic Glucose Activators	Active
7112	PCT	2006/064289	7/14/05	7/14/06				Urea Glucokinase Activators	Active
7127	US	60/800,354	-	4/28/06				Benzamide Glucokinase Activators	Active
7208	PCT	PCT/EP06/064028	7/8/05	7/07/06				Dicycloalkylcarbamoyl Ureas as Glucokinase Activators	Active
7209	US	60/737,143	-	11/16/05					Abandoned 11/16/06
7209	EP	05110779.5		11/16/05					Active
7209	PCT	PCT/EP06/064026	7/8/05	7/7/06				Dicycloalkyl Urea Glucokinase Activators	Active
7385	US	60/800,574	-	5/15/06				Benzamide Glucokinase Activators	Active
7385	US	60/813,858	-	6/15/06					Active
7562	US	60/879,683	-	1/10/07				Urea Glucokinase Activators	Active
7562	EP	07100275.2	1/9/07	1/9/07					Active
7563	US	60/879,961	-	1/11/07				Urea Glucokinase Activators	Active
7563	EP	07100406.3	1/11/07	1/11/07					Active

Press Release DRAFT

20 February 2007 DRAFT 2 /

TransTech Pharma, Inc. Obtains Exclusive License to Glucokinase Activator Programme forthe Treatment of Diabetes from Novo Nordisk

Bagsværd, Denmark; High Point, NC – Novo Nordisk A/S and TransTech Pharma, Inc. announced today an agreement whereby TransTech has obtained an exclusive license from Novo Nordisk to its clinical glucokinase activator (GKA) programme. Tests in a variety of mammalian species suggest that glucokinase activators can help people with diabetes control their glucose levels. Under the terms of the agreement, TransTech will obtainall rights worldwide to Novo Nordisk's GKA programme including preclinical and clinical compounds, the latter with human data.

On 15 January, Novo Nordisk announced a decision to focus all its research and development resources on the company's growing pipeline of protein-based pharmaceuticals. As a result of this decision the company said it would out-license existing preclinical and clinical small-molecule projects, including its GKA programme which is currently in clinical testing.

The drug candidates licensed by TransTech are novel, orally administered compounds discovered during a strategic research collaboration initiated in2001 between TransTech and Novo Nordisk utilising TransTech's proprietary small-molecule discovery engine, TTP Translational TechnologyÒ.

Novo Nordisk A/S
Corporate Communications

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24256790

Adnan Mjalli, PhD, Founder, chairman and chief executive officer of TTP, said, “The promise of glucokinase activators to transform diabetes therapyis enormous. We are excited to obtain all the rights to these drug candidates, which we jointly discovered with Novo Nordisk, a recognised worldwideleader in diabetes therapies. The addition of the glucokinase activator programme will greatly enhance our existing diabetes and obesity portfolio and allow TransTech to become a world leader in the discovery and development of novel treatments for diabetes and obesity – a key therapeutic focus ofthe company. Our current diabetes and obesity portfolio includes orally administered and novel therapeutic development candidates targeting PTP1b inhibitors, AgRP inhibitors, GLP1R agonists and AMPK activators.”

Mads Krogsgaard Thomsen, executive vice president and chief science officer of Novo Nordisk, said: “We are very pleased that it has been possible toreach an agreement with TransTech in such short time. They have been our partners in the GKA programme all along, and they have the capabilities totake on the further development. This allows us to focus our R&D on therapeutic proteins which is where we have our core competences, while keeping a financial stake in the GKA programme.”

TransTech will make an up-front payment to Novo Nordisk for the licensed rights, and has also committed to additional payments as developmentmilestones are reached, as well as royalties on commercial product sales. The parties have agreed not to disclose further terms of the agreement.

About TransTech Pharma, Inc.
TransTech Pharma is a privately held clinical-stage pharmaceutical company working on the discovery, development, and commercialization of human therapeutics to fill unmet medical needs. The Company’s high-throughput drug discovery platform, TTP Translational Technology®, translatesthe functional modulation of human proteins into safe and effective medicines. TransTech has a pipeline of small-molecule clinical and pre-clinical drug candidates for the treatment of a wide range of human diseases, including central nervous system disorders, type I/II diabetes, obesity, cardiovascular and cancer. For further company information, visit http://www.ttpharma.com.

About Novo Nordisk
Novo Nordisk is a healthcare company and a world leader in diabetes care. The company has the broadest diabetes product portfolio in the industry, including the most advanced products within the area of insulin delivery systems. In addition, Novo Nordisk has a leading position within areas such as haemostasis management, growth hormone therapy and hormone replacement therapy. Novo Nordisk manufactures and markets pharmaceutical products and services that make a significant difference to patients, the medical profession and society. With headquarters in Denmark, Novo Nordiskemploys more than 23,600 employees in 79 countries, and markets its products in 179 countries. Novo Nordisk’s B shares are listed on the stock exchanges in Copenhagen and London. Its ADRs are listed on the New York Stock Exchange under the symbol ‘NVO’. For more information, visit novonordisk.com.

For further information contact:

TransTech Pharma Inc.

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Novo Nordisk

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For Immediate Release

TransTech Pharma, Inc. Obtains Exclusive License to Glucokinase Activator Programfor the Treatment of Diabetes from Novo Nordisk

High Point, NC; Bagsvaerd, Denmark - February 20, 2007 - TransTech Pharma and Novo Nordisk A/S announced today an agreement whereby TransTech has obtained an exclusive license from Novo Nordisk to its clinical glucokinase activator (GKA) program. Tests in a variety of mammalian species suggest that glucokinase activators can help people with diabetes control their glucose levels. Under the terms of the agreement, TransTech will obtain all rights worldwide to Novo Nordisk's GKA program including preclinical and clinical compounds, the latter with human data.

On 15 January, Novo Nordisk announced a decision to focus all its research and development resources on the company's growing pipeline of protein-based pharmaceuticals. As a result of this decision the company said it would out-license existing preclinical and clinical small-molecule projects, including its GKA program which is currently in clinical testing.

The drug candidates licensed by TransTech are novel, orally administered compounds discovered during a strategic research collaboration initiated in 2001 between TransTech and Novo Nordisk utilizing TransTech's proprietary small-molecule discovery engine, TTP Translational TechnologyÒ.

Adnan Mjalli, PhD, founder, chairman and chief executive officer of TTP, said, "The promise of glucokinase activators to transform diabetes therapy isenormous. We are excited to obtain all the rights to these drug candidates, which we jointly discovered with Novo Nordisk, a recognized worldwide leader in diabetes therapies. The addition of the glucokinase activator program will greatly enhance our existing diabetes and obesity portfolio and allow TransTech to become a world leader in the discovery and development of novel treatments for diabetes and obesity – a key therapeutic focus of the company. Our current diabetes and obesity portfolio includes orally administered and novel therapeutic development candidates targeting PTP1b inhibitors, AgRP inhibitors, GLP1R agonists and AMPK activators."

Mads Krogsgaard Thomsen, executive vice president and chief science officer of Novo Nordisk, said: "We are very pleased that it has been possible toreach an agreement with TransTech in such short time. They have been our partners in the GKA program all along, and they have the capabilities to take on the further development. This allows us to focus our R&D on therapeutic proteins which is where we have our core competences, while keeping a financial stake in the GKA program."

TransTech will make an up-front payment to Novo Nordisk for the licensed rights, and has also committed to additional payments as developmentmilestones are reached, as well as royalties on commercial product sales. The parties have agreed not to disclose further terms of the agreement.

About TransTech Pharma, Inc.

TransTech Pharma is a privately held clinical-stage pharmaceutical company working on the discovery, development, and commercialization of humantherapeutics to fill unmet medical needs. The Company's high-throughput drug discovery platform, TTP Translational Technology®, translates the functional modulation of human proteins into safe and effective medicines. TransTech has a pipeline of small-molecule clinical and pre-clinical drug candidates for the treatment of a wide range of human diseases, including central nervous system disorders, type I/II diabetes, obesity, cardiovascular and cancer. For further company information, visit http://www.ttpharma.com.

About Novo Nordisk

Novo Nordisk is a healthcare company and a world leader in diabetes care. The company has the broadest diabetes product portfolio in the industry, including the most advanced products within the area of insulin delivery systems. In addition, Novo Nordisk has a leading position within areas such ashaemostasis management, growth hormone therapy and hormone replacement therapy. Novo Nordisk manufactures and markets pharmaceutical products and services that make a significant difference to patients, the medical profession and society. With headquarters in Denmark, Novo Nordisk employs more than 23,600 employees in 79 countries, and markets its products in 179 countries. Novo Nordisk's B shares are listed on the stock exchanges in Copenhagen and London. Its ADRs are listed on the New York Stock Exchange under the symbol 'NVO'. For more information, visit novonordisk.com.

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Novo Nordisk

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EXHIBIT F

Samples of Licensed Products and Compounds

TransTech shall pay to Novo [***] as consideration for receipt from Novo of the following amounts of Licensed Products and Compounds pursuant to Section 2.2(a). TransTech shall provide Novo with the address of, and Novo shall ship all Licensed Products and Compounds produced according to Good Manufacturing Practices to, a Good Manufacturing Practices facility.

NN9101

- NN9101 not produced according to Good Manufacturing Practices: [***]
- NN9101 not produced according to Good Manufacturing Practices: [***]
- NN9101 produced according to Good Manufacturing Practices: [***]
- NN9101 produced according to Good Manufacturing Practices: [***]
- NN9101 released for Good Manufacturing Practices: [***]

NN9108

- NN9108 produced according to Good Manufacturing Practices: [***]
- NN9108 ordered key starting materials A and B for [***] API - Good Manufacturing Practices batch: [***]

NN9139

- NN9139 released for Good Manufacturing Practices: [***]

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: August 4, 2021

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: August 4, 2021

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 June 30, 2021 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: August 4, 2021

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 June 30, 2021 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: August 4, 2021

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