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, 2018

Or

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

For the transition period from to

Commission file number: 001-37524

vTv Therapeutics Inc.

(Exact name of registrant as specified in its charter)

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

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

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

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted 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 and post 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 3, 2018**
Class A common stock, par value $0.01 per share	11,442,274
Class B common stock, par value $0.01 per share	23,094,221

vTv THERAPEUTICS INC. AND SUBSIDIARIES
INDEX TO FORM 10-Q
FOR THE QUARTER ENDED JUNE 30, 2018

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, 2018 (Unaudited)	December 31, 2017
Assets		
Current assets:		
Cash and cash equivalents	$ 1,163	$ 11,758
Restricted cash and cash equivalents	—	162
Accounts receivable, net	2,270	8,000
Prepaid expenses and other current assets	264	442
Current deposits	2,311	—
Total current assets	6,008	20,362
Restricted cash and cash equivalents, long-term	2,500	2,500
Property and equipment, net	202	283
Long-term investments	2,480	2,480
Long-term deposits	36	2,292
Total assets	$ 11,226	$ 27,917
Liabilities, Redeemable Noncontrolling Interest and Stockholders' Deficit		
Current liabilities:		
Accounts payable and accrued expenses	$ 13,144	$ 13,901
Current portion of deferred revenue	10,114	8,757
Current portion of notes payable	8,229	4,271
Total current liabilities	31,487	26,929
Notes payable	10,863	15,316
Deferred revenue, net of current portion	603	4,497
Warrant liability, related party	201	492
Other liabilities	256	290
Total liabilities	43,410	47,524
Commitments and contingencies		
Redeemable noncontrolling interest	39,413	131,440
Stockholders' deficit:		
Class A Common Stock, $0.01 par value; 100,000,000 shares authorized, 10,871,498 and 9,693,254 shares outstanding as of June 30, 2018 and December 31, 2017, respectively	109	97
Class B Common Stock, $0.01 par value; 100,000,000 shares authorized, 23,094,221 and 23,119,246 shares outstanding as of June 30, 2018 and December 31, 2017, respectively	232	232
Additional paid-in capital	134,587	127,682
Accumulated deficit	(206,525)	(279,058)
Total stockholders' deficit attributable to vTv Therapeutics Inc.	(71,597)	(151,047)
Total liabilities, redeemable noncontrolling interest and stockholders' deficit	$ 11,226	$ 27,917

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,	
	2018	2017	2018	2017
Revenue	$ 2,473	$ 13	$ 4,537	$ 43
Operating expenses:				
Research and development	8,594	9,623	17,537	20,583
General and administrative	2,737	3,005	4,992	5,829
Total operating expenses	11,331	12,628	22,529	26,412
Operating loss	(8,858)	(12,615)	(17,992)	(26,369)
Other income	—	—	36	—
Other income – related party	316	—	291	—
Interest income	16	33	34	60
Interest expense	(870)	(832)	(1,725)	(1,391)
Loss before income taxes and noncontrolling interest	(9,396)	(13,414)	(19,356)	(27,700)
Income tax provision	200	—	200	—
Net loss before noncontrolling interest	(9,596)	(13,414)	(19,556)	(27,700)
Less: net loss attributable to noncontrolling interest	(6,524)	(9,451)	(13,532)	(19,517)
Net loss attributable to vTv Therapeutics Inc.	$ (3,072)	$ (3,963)	$ (6,024)	$ (8,183)
Net loss per share of vTv Therapeutics Inc. Class A Common Stock, basic and diluted	$ (0.31)	$ (0.41)	$ (0.61)	$ (0.84)
Weighted-average number of vTv Therapeutics Inc. Class A Common Stock, basic and diluted	10,049,831	9,693,254	9,875,743	9,693,254

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)

	Redeemable Noncontrolling Interest	Class A Common Stock		Class B Common Stock		Additional Paid-in Capital	Accumulated Deficit	Total Stockholders' Deficit
		Shares	Amount	Shares	Amount			
Balances at December 31, 2017	**$ 131,440**	**9,693,254**	**$ 97**	**23,119,246**	**$ 232**	**$ 127,682**	**$ (279,058)**	**$ (151,047)**
Net loss	(13,532)	—	—	—	—	—	(6,024)	(6,024)
Cumulative effect of accounting change	—	—	—	—	—	—	213	213
Share-based compensation	—	—	—	—	—	1,766	—	1,766
Exchange of Class B Common Stock for Class A Common Stock	(151)	25,025	—	(25,025)	—	151	—	151
Issuance of Class A Common Stock to a related party under the 2017 Letter Agreement	—	1,141,552	12	—	—	4,988	—	5,000
Vesting of restricted stock units	—	11,667	—	—	—	—	—	—
Change in redemption value of noncontrolling interest	(78,344)	—	—	—	—	—	78,344	78,344
Balances at June 30, 2018	**$ 39,413**	**10,871,498**	**$ 109**	**23,094,221**	**$ 232**	**$ 134,587**	**$ (206,525)**	**$ (71,597)**

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,	
	2018	**2017**
Cash flows from operating activities:		
Net loss before noncontrolling interest	$ (19,556)	$ (27,700)
Adjustments to reconcile net loss before noncontrolling interest to net cash used in operating activities:		
(Gain) loss on disposal of property and equipment, net	(12)	5
Depreciation expense	81	104
Share-based compensation expense	1,766	1,698
Change in fair value of warrants, related party	(291)	—
Amortization of debt discount	547	479
Changes in assets and liabilities:		
Accounts receivable	5,730	—
Prepaid expenses and other assets	(1,920)	(27)
Long-term deposits	2,256	(319)
Accounts payable and accrued expenses	(757)	(679)
Deferred revenue	(2,537)	(21)
Other liabilities	(34)	7
Net cash used in operating activities	(14,727)	(26,453)
Cash flows from investing activities:		
Proceeds from sale of assets	12	—
Purchases of property and equipment	—	(39)
Net cash provided by (used in) investing activities	12	(39)
Cash flows from financing activities:		
Issuance of Class A Common Stock to a related party under the 2017 Letter Agreement	5,000	—
Proceeds from debt issuance	—	7,500
Repayment of notes payable	(1,042)	—
Net cash provided by financing activities	3,958	7,500
Net decrease in cash, cash equivalents and restricted cash and cash equivalents	(10,757)	(18,992)
Total cash, cash equivalents and restricted cash and cash equivalents, beginning of period	14,420	51,505
Total cash, cash equivalents and restricted cash and cash equivalents, end of period	$ 3,663	$ 32,513
Non-cash activities:		
Change in redemption value of noncontrolling interest	$ (78,344)	$ 9,147
Exchange of vTv Therapeutics Inc. Class B Common Stock and vTv Therapeutics, LLC member units for vTv Therapeutics Inc. Class A Common Stock	$ 151	$ —

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

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

Description of Business

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

Principles of Consolidation

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

The Company has determined that vTv LLC is a variable-interest entity ("VIE") for accounting purposes and that vTv Therapeutics Inc. is the primary beneficiary of vTv LLC because (through its managing member interest in vTv LLC and the fact that the senior management of vTv Therapeutics Inc. is also the senior management of vTv LLC) it has the power and benefits to direct all of the activities of vTv LLC, which include those that most significantly impact vTv LLC's economic performance. vTv Therapeutics Inc. has therefore consolidated vTv LLC's results pursuant to Accounting Standards Codification Topic 810, "Consolidation" in its condensed consolidated financial statements. As of June 30, 2018, various holders own non-voting interests in vTv LLC, representing a 68.0% economic interest in vTv LLC, effectively restricting vTv Therapeutics Inc.'s interest to 32.0% of vTv LLC's economic results, subject to increase in the future, should vTv Therapeutics Inc. purchase additional non-voting common units ("vTv Units") of vTv LLC, or should the holders of vTv Units decide to exchange such units (together with shares of Class B Common Stock) for shares of Class A Common Stock (or cash) pursuant to the Exchange Agreement (as defined in Note 8). 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 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 agreement, dated as of December 5, 2017, with MacAndrews and Forbes Group LLC (the "2017 Letter Agreement"). vTv Therapeutics Inc. will not be required to provide financial or other support for vTv LLC outside of its obligations pertaining to the Loan Agreement as a co-borrower. However, vTv Therapeutics Inc. will control its business and other activities through its managing member interest in vTv LLC, and its management is the management of vTv LLC. The creditors of vTv LLC do not have any recourse to the general credit of vTv Therapeutics Inc. except as allowed under the provisions of the Loan Agreement. Nevertheless, because vTv Therapeutics Inc. will have no material assets other than its interests in vTv LLC, any financial difficulties at vTv LLC could result in vTv Therapeutics Inc. recognizing a loss.

Going Concern and Liquidity

To date, the Company has not generated any product revenue and has not achieved profitable operations. The continuing development of our drug candidates will require additional financing. From its inception through June 30, 2018, 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, 2018, the Company had an accumulated deficit of $206.5 million and has generated net losses in each year of its existence. As of June 30, 2018, the Company's liquidity sources included cash and cash equivalents of $1.2 million, the $1.7 million upfront payment receivable, net of applicable taxes, under Company's license agreement with Newsoara Biopharma Co., Ltd., ("Newsoara") (the "Newsoara License Agreement") and the remaining funds available under the 2017 Letter Agreement. On July 30, 2018, the Company entered into another letter agreement with MacAndrews and Forbes Group LLC (the "2018 Letter Agreement") which provides an additional $10.0 million of funding to the Company for its operations. See Note 12 for further details. Management estimates that these sources of funding will allow the Company to continue its operations and activities for a period of less than twelve months from the issuance of these Condensed Consolidated Financial Statements.

Based on the Company's current operating plan, management believes that the liquidity sources listed above will allow the Company to meet its liquidity requirements through September 2018.

In April 2018, the Company announced that the results from Part A of the STEADFAST Study ("Part A") did not meet either co-primary efficacy endpoint. Based upon Part A results, the Company discontinued clinical studies involving *azeliragon*, including

the open-label extension study and Part B of the STEADFAST Study ("Part B"). At time of closure of Part B, most subjects had completed 12 months.

In May 2018, the Company announced that based on post hoc analyses of the data from Part A, a subpopulation was identified that showed statistically significant benefit (unadjusted for multiple post hoc comparisons) from *azeliragon* relative to placebo on ADAS-cog. The identified subpopulation consisted of participants with peak *azeliragon* blood plasma concentration of less than 7.5 ng/mL and MMSE scores at baseline of 19-27. Based on the subpopulation data analyses from Part A and the prior *azeliragon* trials, the Company submitted a revised Statistical Analysis Plan (SAP) to the Food and Drug Administration ("FDA") for Part B that pre-specified a target population for the primary study analysis at 12 months.

In June 2018, the Company announced that the results from Part B did not meet either co-primary efficacy endpoint. However, consistent with the findings in Part A and the Phase 2b trial, lower maximal plasma concentrations of *azeliragon* in Part B were associated with improvements in efficacy relative to placebo. Relying upon the program's Fast Track Designation status and study results to date, the Company is pursuing discussions with the Food and Drug Administration ("FDA") to propose a pathway for further clinical development in support of regulatory approval of *azeliragon*. On July 31, 2018, the Company submitted a full briefing book to the FDA in support of its request for a Type C meeting. Based upon FDA guidance, the Company expects either to meet with the FDA in person in October 2018 or receive written responses to its questions in September 2018.

Though the Company's expected cash needs for the foreseeable future have been significantly reduced with the discontinuation of the STEADFAST and open label extension studies, the Company will require additional financing to continue its operations. The Company is seeking possible additional partnering opportunities for its GKA, GLP-1r and other drug candidates which it believes may provide additional cash for use in its operations and the continuation of clinical trials for its drug candidates. The Company is also pursuing other sources of financing to provide flexibility to its operating plan. The timing and availability of such financing is not yet known. The failure of the STEADFAST Study to meet either co-primary endpoint may make it more difficult for the Company to obtain such financing. These conditions raise substantial doubt about the Company's ability to continue as a going concern.

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, 2018, Condensed Consolidated Statements of Operations for the three and six months ended June 30, 2018 and 2017, Condensed Consolidated Statement of Changes in Redeemable Noncontrolling Interest and Stockholders' Deficit for the six months ended June 30, 2018 and Condensed Consolidated Statements of Cash Flows for the six months ended June 30, 2018 and 2017 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, 2017 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, 2018, the results of operations for the three and six months ended June 30, 2018 and 2017 and cash flows for the six months ended June 30, 2018 and 2017. The December 31, 2017 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, 2018 and 2017 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.

The accounts receivable balances outstanding as of June 30, 2018 consisted of milestone payments receivable related to an initial license payment pursuant to the Newsoara License Agreement and the Company's agreement with JDRF International ("JDRF"). The accounts receivable balance at December 31, 2017 related to an upfront payment received in the first quarter of 2018 pursuant to the Company's license agreement with Hangzhou Zhongmei Huadong Pharmaceutical Co., Ltd. ("Huadong").

Three customers represented 100% of the revenue earned during the three and six months ended June 30, 2018. One customer represented 100% of the revenue earned during the three and six months ended June 30, 2017.

Cash and Cash Equivalents

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

Restricted Cash and Cash Equivalents

Restricted cash and cash equivalents, current as of December 31, 2017 was $0.2 million. This amount was received through a research, development and commercialization agreement with JDRF (the "JDRF Agreement"). There were no amounts held as restricted cash and cash equivalents as of June 30, 2018 related to this agreement. Restricted cash and cash equivalents, long-term as of June 30, 2018 and December 31, 2017 was $2.5 million at each date. These amounts relate to the minimum balance that the Company must maintain in a deposit account that is pledged to secure the Loan Agreement and is subject to an account control agreement pursuant to the Loan Agreement.

The following table provides a reconciliation of cash, cash equivalents and restricted cash reported within the Condensed Consolidated Balance Sheets as of June 30, 2018 and December 31, 2017 that sum to the total of the same such amounts shown in the Condensed Consolidated Statements of Cash Flows (in thousands):

	June 30, 2018	December 31, 2017
Cash and cash equivalents	$ 1,163	$ 11,758
Restricted cash and cash equivalents	—	162
Restricted cash and cash equivalents, long-term	2,500	2,500
Total cash, cash equivalents and restricted cash and cash equivalents shown in the consolidated statement of cash flows	$ 3,663	$ 14,420

Investments

In connection with the License Agreement with Reneo Pharmaceuticals, Inc. ("Reneo") (the "Reneo License Agreement"), the Company received common stock and certain participation rights representing a minority equity interest in Reneo that is classified as a long-term investment in the Company's Condensed Consolidated Balance Sheets as of June 30, 2018 and December 31, 2017. This investment is accounted for under the cost method because the Company owns less than 20% of the voting equity and does not have the ability to exercise significant influence over Reneo.

On January 1, 2018, the Company adopted ASU No. 2016-01, "Recognition and Measurement of Financial Assets and Financial Liabilities". This guidance requires equity investments to be measured at fair value with changes in fair value recognized in net income. Since it does not have a readily determinable market value, the Company has elected to measure its investment in Reneo at cost minus impairment, if any, plus or minus changes resulting from observable price changes in orderly transactions for the identical or similar investment.

No adjustments have been made to the value of the Company's investment in Reneo for the three and six months ended June 30, 2018 either due to impairment or based on observable price changes.

Revenue Recognition

On January 1, 2018, the Company adopted ASC Topic 606, "Revenue From Contracts With Customers" ("ASC Topic 606"), using the modified retrospective method applied to those contracts which were not completed as of the adoption date. Results for reporting periods beginning after January 1, 2018 are presented under ASC Topic 606, while prior period amounts are not adjusted and continue to be reported in accordance with the Company's historic accounting under ASC Topic 605.

The Company recorded a net reduction to its opening accumulated deficit of $0.2 million as of January 1, 2018 due to the cumulative impact of adopting ASC Topic 606, with the impact primarily related to the recognition of an asset for the incremental costs of obtaining contracts.

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, depreciation expense on research and development property and equipment, costs of preclinical studies, clinical trials and related clinical manufacturing, costs of drug development, costs of materials and supplies, facilities costs, overhead costs, regulatory and compliance costs, and fees paid to consultants and other entities that conduct certain research and development activities on the Company's behalf. Research and development costs are expensed as incurred.

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

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

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

Recently Issued Accounting Pronouncements

Recently Adopted Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2014-09, "Revenue From Contracts With Customers", that outlines a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers and supersedes most current revenue recognition guidance, including industry-specific guidance. The Company adopted this guidance as of January 1, 2018 using the modified retrospective transition method. See Note 2 – "Revenue Recognition" for further details.

In January 2016, the FASB issued ASU No. 2016-01, "Recognition and Measurement of Financial Assets and Financial Liabilities", which amends ASC 825-10, "Financial Instruments – Overall". This ASU amends various aspects of the recognition, measurement, presentation and disclosure of financial instruments. This ASU is effective for fiscal years beginning after December 15, 2017, including interim periods within those fiscal years. The Company adopted this guidance in the first quarter of fiscal 2018. The Company has elected to use the measurement alternative, defined as cost, less impairments, adjusted by observable price changes. The adoption of this guidance did not have a material impact on the Company's Condensed Consolidated Financial Statements. See Note 2 – "Investments" for further details.

In May 2017, the FASB issued ASU No. 2017-09, "Compensation-Stock Compensation (Topic 718): Scope of Modification Accounting" ("ASU 2017-09"), which clarifies the changes to terms or conditions of a share-based payment award that require an entity to apply modification accounting. ASU 2017-09 is effective for annual reporting periods, and interim periods therein, beginning after December 15, 2017. The Company adopted this guidance in the first quarter of fiscal 2018. The adoption of this guidance did not have a material impact on the Company's Condensed Consolidated Financial Statements.

Recently Issued Accounting Pronouncements Not Yet Adopted

In February 2016, the FASB issued ASU No. 2016-02, "Lease (Topic 842)" ("ASU 2016-02"), which increases transparency and comparability among companies accounting for lease transactions. The most significant change of this update will require the recognition by a lessee of lease assets and liabilities on its balance sheet for operating lease arrangements with lease terms greater than 12 months. This update will require a modified retrospective application which includes a number of optional practical expedients related to the identification and classification of leases commenced before the effective date. This ASU is effective for fiscal years and interim periods within those fiscal years, beginning after December 15, 2018. The adoption of this guidance will result in the recognition of additional assets and liabilities related to the Company's operating leases within its Condensed Consolidated Balance Sheets.

Note 3: Collaboration Agreements

Reneo License Agreement

On December 21, 2017, the Company entered into 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. Under the terms of the Reneo License Agreement, Reneo paid the Company an upfront cash payment of $3.0 million. The Company is eligible to receive additional potential development, regulatory and sales-based milestone payments totaling up to $94.5 million. In addition, Reneo is obligated to pay the Company royalty payments at mid-single to low-double digit rates, based on tiers of annual net sales of licensed products. Such royalties will be payable on a licensed product-by-licensed product and country-by-country 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 has also received common stock and certain participation rights representing a minority equity interest in Reneo.

Pursuant to the terms of the Reneo License Agreement, the Company is required to provide technology transfer services for a defined period after the effective date. In accordance with ASC Topic 606, the Company identified all of the performance obligations at the inception of the Reneo 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. The remaining milestone payments that the Company is eligible to receive have not been included in the transaction price as of June 30, 2018, as it is not considered probable that such payments will be received. The unrecognized amount of the transaction price allocated to this performance obligation as of June 30, 2018 was $3.6 million.

The Company determined that there was no discernable pattern in which the technology services would be provided during the transfer services period. As such, the Company determined that the straight-line method would be used to recognize revenue over the transfer service period. The remainder of this performance obligation will be recognized over approximately 11.5 months. For the three and six months ended June 30, 2018, $0.9 million and $1.8 million of revenue has been recognized related to this combined performance obligation, respectively.

Huadong License Agreement

On December 21, 2017, the Company entered into a License Agreement with Huadong (the "Huadong License Agreement"), under which Huadong obtained an exclusive and sublicensable license to develop and commercialize the Company's glucagon-like peptide-1 receptor agonist ("GLP-1r") program, including the compound *TTP273*, for therapeutic uses in humans or animals, in China and certain other Pacific Rim countries, including Australia and South Korea (collectively, the "Huadong License Territory"). Additionally, under the Huadong License Agreement, the Company obtained a non-exclusive, sublicensable, royalty-free license to develop and commercialize certain Huadong patent rights and know-how related to the Company's GLP-1r program for therapeutic uses in humans or animals outside of the Huadong License Territory. Under the terms of the Huadong License Agreement, Huadong paid the Company an initial license fee of $8.0 million and is obligated to pay potential development and regulatory milestone payments totaling up to $25.0 million, with an additional potential regulatory milestone of $20.0 million if Huadong receives regulatory approval for a central nervous system indication. In addition, the Company is eligible for an additional $50.0 million in potential sales-based milestones, as well as royalty payments ranging from low-single to low-double digit rates, based on tiered sales of licensed products.

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

In accordance with ASC Topic 606, the Company identified all of the performance obligations at the inception of the Huadong License Agreement. The significant performance obligations were determined to be (i) the exclusive license to develop and commercialize the Company's GLP-1r program, (ii) technology transfer services related to the chemistry and manufacturing know-how for a defined period after the effective date (iii) the obligation to sponsor and conduct the Phase 2 MRCT, (iv) the Company's obligation to participate on a joint development committee, and (v) other obligations considered to be de minimis in nature.

The transaction price has been allocated to these performance obligations based on their relative standalone selling prices, which were estimated using an expected cost plus margin approach. The remaining milestone payments that the Company is eligible to receive have not been included in the transaction price as of June 30, 2018, as it is not considered probable that such payments will be received.

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 unrecognized amount of the transaction price allocated to this performance obligation as of June 30, 2018 was $5.6 million. 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 determined that the straight-line method would be used to recognize revenue for this performance obligation over the transfer service period. The unrecognized amount of the transaction price allocated to this performance obligation of $4.5 million will be recognized over approximately 11.5 months. For the three and six months ended June 30, 2018, $1.1 million and $2.3 million of revenue has been recognized related to this combined performance obligation, respectively.

The Company also determined that the obligation to sponsor and conduct a portion of the Phase 2 MRCT should be treated as a separate performance obligation. A portion of the total consideration received under the Huadong License Agreement was allocated to this performance obligation based on its estimated standalone selling price. This amount was deferred as of June 30, 2018 and revenue will be recognized using the proportional performance model over the period during which the Company conducts the Phase 2 MRCT trial. No revenue for this performance obligation has been recognized during the three and six months ended June 30, 2018.

The Company also determined that 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 should be treated as a separate performance obligation. A portion of the total consideration received under the Huadong License Agreement was allocated to this performance

obligation based on its estimated standalone selling price. This amount was deferred as of June 30, 2018 and revenue will be recognized using the proportional performance model over the period of the Company's participation on the JDC. No revenue for this performance obligation has been recognized during the three and six months ended June 30, 2018.

Newsoara License Agreement

On May 31, 2018, the Company entered into 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. Under the terms of the Newsoara License Agreement, Newsoara paid the Company an upfront cash payment of $2.0 million. The Company is eligible to receive additional potential development, regulatory and sales-based milestone payments totaling up to $63.0 million. In addition, Newsoara is obligated to pay the Company royalty payments at high-single to low-double digit rates, based on tiers of annual net sales of licensed products. Such royalties will be payable on a licensed product-by-licensed product and country-by-country 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.

Pursuant to the terms of the Newsoara License Agreement, the Company is required to provide technology transfer services for a defined period after the effective date. In accordance with ASC Topic 606, the Company identified all of the performance obligations at the inception of the Newsoara 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. The remaining milestone payments that the Company is eligible to receive have not been included in the transaction price as of June 30, 2018, as it is not considered probable that such payments will be received. The unrecognized amount of the transaction price allocated to this performance obligation as of June 30, 2018 was $1.6 million.

The Company determined that there was no discernable pattern in which the technology services would be provided during the transfer services period. As such, the Company determined that the straight-line method would be used to recognize revenue over the transfer service period. The remainder of this performance obligation will be recognized over approximately 3.5 months. For each of the three and six months ended June 30, 2018, $0.4 million of revenue has been recognized related to this combined performance obligation.

JDRF Agreement

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

Payments that the Company receives from JDRF under this agreement will be recorded as restricted cash and current liabilities and recognized as an offset to research and development expense, based on the progress of the project, and only to the extent that the restricted cash is utilized to fund such development activities. As of June 30, 2018, the Company had received funding under this agreement of $0.5 million, with an additional $0.3 million receivable at June 30, 2018. Research and development costs were offset by a total of $0.5 million over the course of this agreement. As of June 30, 2018, the Company has recognized restricted cash of an immaterial amount related to this agreement.

Contract Liabilities

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

	June 30, 2018	December 31, 2017	Change
Deferred revenue	$ 10,114	$ 8,757	$ 1,357
Deferred revenue - net of current portion	603	4,497	(3,894)
Total contract liabilities	$ 10,717	$ 13,254	$ (2,537)

The change in our contract liabilities for the six months ended June 30, 2018 was due to the recognition of revenue based on the estimated performance of services under the related collaboration agreements as well as the recognition of deferred revenue related to

the Company's Newsoara License Agreement. There were no changes in the estimated transaction prices for the related contracts during the three and six months ended June 30, 2018.

Note 4: Share-Based Compensation

During the three and six months ended June 30, 2018, the Company issued non-qualified stock option awards to certain employees of the Company. These option awards vest ratably over a three-year period and the option awards expire after a term of ten years from the date of grant. As of June 30, 2018, the Company had total unrecognized stock-based compensation expense for its outstanding stock option awards of approximately $2.2 million, which is expected to be recognized over a weighted average period of 1.6 years. The weighted average grant date fair value of option grants during the six months ended June 30, 2018 and 2017 was $2.30 and $3.80 per option, respectively. The aggregate intrinsic value of the in-the-money awards outstanding at June 30, 2018 was $0.

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

	For the Six Months Ended June 30,	
	2018	2017
Expected volatility	71.15% - 99.23%	84.22% - 85.93%
Expected life of option, in years	5.7 - 6.0	5.8 - 6.0
Risk-free interest rate	2.69% - 2.81%	1.94% - 2.24%
Expected dividend yield	0.00%	0.00%

The following table summarizes the activity related to the stock option awards for the six months ended June 30, 2018:

	Number of Shares	Weighted-Average Exercise Price
Awards outstanding at December 31, 2017	1,960,732	$ 8.50
Granted	101,250	3.29
Forfeited	(135,057)	6.04
Awards outstanding at June 30, 2018	1,926,925	$ 8.40
Options exercisable at June 30, 2018	1,033,730	$ 9.34
Weighted average remaining contractual term	7.7 Years	
Options vested and expected to vest at June 30, 2018	1,893,488	$ 8.45
Weighted average remaining contractual term	8.0 Years	

The following table summarizes the activity related to the RSU awards for the six months ended June 30, 2018:

	Number of Shares	Weighted-Average Grant Date Fair Value
Awards outstanding at December 31, 2017	35,000	$ 5.81
Vested	(11,667)	5.81
Awards outstanding at June 30, 2018	23,333	$ 5.81
RSUs expected to vest at June 30, 2018	22,779	$ 5.81

As of June 30, 2018, the Company had total unrecognized stock-based compensation expense for its outstanding RSU awards of approximately $0.1 million, which is expected to be recognized over a weighted-average period of 1.7 years. The aggregate intrinsic value of the RSUs outstanding at June 30, 2018 was de minimis.

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Research and development	$ 225	$ 395	$ 624	$ 672
General and administrative	578	564	1,142	1,026
Total share-based compensation expense	$ 803	$ 959	$ 1,766	$ 1,698

Note 5: Notes Payable

Notes payable consist of the following (in thousands):

	June 30, 2018	December 31, 2017
Notes payable under the Loan Agreement	$ 18,958	$ 20,000
Accreted final payment (unamortized debt discount)	134	(413)
Total notes payable	19,092	19,587
Less: Current portion	(8,229)	(4,271)
Total notes payable, net of current portion	$ 10,863	$ 15,316

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

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

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

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

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

The Loan Agreement includes customary affirmative and restrictive covenants, including, but not limited to, restrictions on the payment of dividends or other equity distributions and the incurrence of debt or liens upon the assets of the Company or its subsidiaries. The Loan Agreement does not contain any financial maintenance covenants other than a requirement to maintain a minimum cash balance of not less than $2.5 million in a deposit account pledged to secure the Loan Agreement and subject to an account control agreement. The minimum cash balance covenant was included as part of an amendment to the Loan Agreement in connection with our entry into the Huadong License Agreement in December 2017. The Loan Agreement includes customary events of default, including payment defaults, covenant defaults, and material adverse change default. Upon the occurrence of an event of default and following any applicable cure periods, a default interest rate of an additional 5.0% will be applied to the outstanding loan balances, and the Lenders may declare all outstanding obligations immediately due and payable and take such other actions as set forth in the Loan Agreement.

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

The Company incurred $0.7 million of costs in connection with the Loan Agreement in the year ended December 31, 2016. These costs, along with the allocated fair value of the Warrants issued of $0.9 million were treated as a debt discount, and are offset against the carrying value of the notes payable in the Company's Condensed Consolidated Balance Sheet as of June 30, 2018 and December 31, 2017. These costs will be recognized as interest expense over the term of the first tranche using the effective interest

method. The final payments for the first and second loan tranches of $0.8 million and $0.5 million, respectively, will be accrued as additional interest expense, using the effective interest method, over the term of the relevant tranche.

Note 6: Commitments and Contingencies

Legal Matters

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

Columbia University Agreement

In May 2015, the Company entered into a worldwide exclusive agreement with Columbia University ("Columbia") to license certain intellectual property from Columbia. Under the agreement, the Company is obligated to pay to Columbia (1) an annual fee of $0.1 million from 2015 through 2021, (2) a potential regulatory milestone payment of $0.8 million and (3) potential royalty payments at a single digit royalty rate based on net sales of licensed products as defined in the agreement.

Novo Nordisk

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

Huadong License Agreement

Under the terms of the Huadong License Agreement, vTv LLC is responsible for sponsoring the Phase 2 MRCT including sites in both the US and the Huadong License Territory for the purpose of assessing the safety and efficacy of *TTP273* in patients with type 2 diabetes. The Phase 2 MRCT will be designed to satisfy the requirements of the China Food and Drug Administration necessary in order for Huadong to begin a Phase 3 clinical trial in China. vTv LLC will be responsible for contributing up to $3.0 million in connection with the Phase 2 MRCT.

Note 7: Redeemable Noncontrolling Interest

The Company is subject to the Exchange Agreement with respect to the vTv Units representing the 68.0% noncontrolling interest in vTv LLC outstanding as of June 30, 2018 (see Note 8). 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, 2018 and December 31, 2017, the redeemable noncontrolling interest was recorded based on the redemption value as of the balance sheet date of $39.4 million and $131.4 million, respectively.

Note 8: Related-Party Transactions

MacAndrews & Forbes Incorporated

As of June 30, 2018, subsidiaries and affiliates of MacAndrews & Forbes Incorporated (collectively "MacAndrews") indirectly controlled 23,084,267 shares of the Company's Class B Common Stock and 3,757,218 shares of the Company's Class A Common Stock. As a result, MacAndrews' holdings represent approximately 79.0% of the combined voting power of the Company's outstanding common stock.

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

Equity Financing

In December 2017, the Company entered into the 2017 Letter Agreement with MacAndrews. Under the 2017 Letter Agreement, until December 5, 2018, the Company has the right to sell to MacAndrews shares of its Class A Common Stock at a price equal to $4.38 per share, and MacAndrews has the right (exercisable up to three times) to require the Company to sell to it shares of Class A Common Stock at the same price. An aggregate of $10.0 million worth of Class A Common Stock may be sold under the 2017 Letter Agreement (whether at the Company's or MacAndrews' option). In addition, in connection with the 2017 Letter Agreement, the Company also issued MacAndrews warrants (the "Consideration Warrants") to purchase 198,267 shares of the Company's Class A Common Stock at a price of $5.04 per share, exercisable until December 5, 2024. As of June 30, 2018, the Company has received funding of $5.0 million under the 2017 Letter Agreement and, in exchange, has issued a total of 1,141,552 shares of its Class A Common Stock. See Note 12 for further information regarding funding under the 2017 Letter Agreement occurring after June 30, 2018.

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, 2018, MacAndrews had not exchanged any shares under the provisions of this agreement.

Tax Receivable Agreement

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

As no shares have been exchanged by MacAndrews pursuant to the Exchange Agreement (discussed above), the Company has not recognized any liability nor has it made any payments pursuant to the Tax Receivable Agreement as of June 30, 2018.

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 9: Income Taxes

The Company is subject to U.S. federal income taxes as well as state taxes. The Company recorded an income tax provision of $0.2 million for the three and six months ended June 30, 2018 representing foreign withholding taxes incurred in connection with the Newsoara License Agreement. The Company did not record an income tax provision for the three and six months ended June 30, 2017. 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, 2018 is due to the valuation allowance against the Company's expected net operating losses.

As discussed in Note 8, 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, 2018.

On December 22, 2017, the U.S. federal government enacted comprehensive tax reform commonly referred to as the Tax Cuts and Jobs Act ("TCJA"). Under ASC Topic 740, the effects of changes in tax rates and laws are recognized in the period which the new legislation is enacted. Among other things, the TCJA (1) reduces the U.S federal statutory corporate income tax rate from 35% to 21% effective January 1, 2018, (2) eliminates the corporate alternative minimum tax, (3) eliminates the Section 199 deduction, and (4) changes rules related to uses and limitations of net operating loss carryforwards beginning after December 31, 2017.

The SEC staff issued Staff Accounting Bulletin No. 118 ("SAB 118"), which provides guidance on accounting for the tax effects of TCJA. SAB 118 provides a measurement period that should not extend beyond one year from the TCJA enactment date for companies to complete the accounting under ASC Topic 740. To the extent that a company's accounting for certain income tax effects of the TCJA is incomplete but is able to determine a reasonable estimate, it must record a provisional estimate in the financial statements.

The TCJA reduces the corporate tax rate to 21% effective January 1, 2018. While we are able to make a reasonable estimate of the impact of the reduction in the corporate rate, it may be affected by other analyses related to the TCJA. The Company will continue to assess and refine, as necessary, its accounting for the TCJA as additional guidance and interpretation is provided.

Note 10: 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,	
	2018	2017	2018	2017
Numerator:				
Net loss	$ (9,596)	$ (13,414)	$ (19,556)	$ (27,700)
Less: Net loss attributable to noncontrolling interests	(6,524)	(9,451)	(13,532)	(19,517)
Net loss attributable to vTv Therapeutics Inc., basic and diluted	$ (3,072)	$ (3,963)	$ (6,024)	$ (8,183)
Denominator:				
Weighted-average vTv Therapeutics Inc. Class A Common Stock, basic and diluted	10,049,831	9,693,254	9,875,743	9,693,254
Net loss per share of vTv Therapeutics Inc. Class A Common Stock, basic and diluted	$ (0.31)	$ (0.41)	$ (0.61)	$ (0.84)

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

	June 30, 2018	June 30, 2017
Class B Common Stock (1)	23,094,221	23,119,246
Common stock options granted under the Plan	1,926,925	1,926,434
Restricted stock units	23,334	35,000
Common stock options granted under 2017 Letter Agreement	1,141,553	—
Common stock warrants	388,853	190,586
Total	26,574,886	25,271,266

(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 11: Fair Value of Financial Instruments

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

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

The Company measures the value of its investment in Reneo at cost minus impairment, if any, plus or minus changes resulting from observable price changes in orderly transactions for the identical or similar investment. During the three and six months ended June 30, 2018, there were no observable price changes in identical or similar investments, nor were there any indications of impairment. As such, the value of the Company's investment in Reneo was not remeasured.

Assets and Liabilities Measured at Fair Value on a Recurring Basis

The Company evaluates its financial assets and liabilities subject to fair value measurements on a recurring basis to determine the appropriate level in which to classify them for each reporting period. This determination requires significant judgments. The following table summarizes the conclusions reached regarding fair value measurements as of June 30, 2018 and December 31, 2017 (in thousands):

	Balance at June 30, 2018	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Warrant liability, related party (1)	$ 201	$ —	$ —	$ 201
Total	$ 201	$ —	$ —	$ 201

	Balance at December 31, 2017	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)	$ 492	$ —	$ —	$ 492
Total	$ 492	$ —	$ —	$ 492

(1) Fair value determined using an option pricing model based on the Company's current capitalization. Expected volatility is based on a portfolio of selected stocks of companies believed to have market and economic characteristics similar to its own. The risk-free rate is based on the yield of U.S. government securities with the same term as the option as of the valuation date.

	Changes in Level 3 instruments for the six months ended June 30, 2018				
	Balance at January 1	Net Change in fair value included in earnings	Purchases / Issuance	Sales / Repurchases	Balance at June 30,
2018					
Warrant liability, related party	492	(291)	—	—	201
Total	$ 492	$ (291)	$ —	$ —	$ 201
2017					
Warrant liability	$ 167	$ —	$ —	$ (167)	$ —
Total	$ 167	$ —	$ —	$ (167)	$ —

The fair value of the Consideration Warrants was determined using the Black Scholes option pricing model. During the three and six months ended June 30, 2018, the Company recognized a gain of $0.3 million related to the change in fair value of the Consideration Warrants. This gain was recognized as a component of other income – related party in the Condensed Consolidated Statements of Operations. Expected volatility is based on a portfolio of selected stocks of companies believed to have market and economic characteristics similar to its own. The risk-free rate is based on the yield of U.S. government securities with the same term as the option as of the valuation date. Significant inputs utilized in the valuation of the Consideration Warrants as of June 30, 2018 were:

Annual volatility	97.04 %
Annual risk-free rate	2.79 %

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

Note 12: Subsequent Events

On July 6, 2018, the Company caused MacAndrews to purchase an additional 570,776 shares of its Class A Common Stock under the terms of the 2017 Letter Agreement for $2.5 million in cash.

On July 30, 2018, the Company entered into the 2018 Letter Agreement with MacAndrews and Forbes Group LLC. Under the 2018 Letter Agreement, until July 30, 2019, the Company has the right to sell to MacAndrews shares of its Class A Common Stock at a price equal to $1.33 per share, and MacAndrews has the right (exercisable up to three times) to require the Company to sell to it shares of Class A Common Stock at the same price. An aggregate of $10.0 million worth of Class A Common Stock may be sold under the 2018 Letter Agreement (whether at the Company's or MacAndrews' option). In addition, in connection with the 2018 Letter Agreement, the Company also issued MacAndrews warrants to purchase 518,654 shares of the Company's Class A Common Stock at a price of $1.53 per share, exercisable until July 30, 2025.

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

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

Overview

We are a clinical-stage biopharmaceutical company engaged in the discovery and development of orally administered small molecule drug candidates to fill significant unmet medical needs. To date, we have primarily focused our efforts on advancing our programs for the treatment of mild Alzheimer's disease ("AD") and diabetes. In April 2018, we announced that results from Part A of our Phase 3 STEADFAST Study ("Part A") of the investigational medication *azeliragon* (TTP488) in people with mild Alzheimer's disease (the "STEADFAST Study") did not meet either co-primary efficacy endpoint. Following the Part A announcement, we discontinued clinical studies involving *azeliragon*, including the open-label extension study and Part B of the STEADFAST Study ("Part B"). At the time of the closure of Part B, a substantial number of participants had completed 12 months of treatment under the study protocol.

We announced in May 2018, that based on post hoc analyses of the data from Part A of the STEADFAST Study, a subpopulation was identified that showed statistically significant benefit (unadjusted for multiple post hoc comparisons) from *azeliragon* relative to placebo on ADAS-cog. The identified subpopulation consisted of participants with peak *azeliragon* blood plasma concentration of less than 7.5 ng/mL. Based on the subpopulation data analyses from Part A and prior *azeliragon* trials, we submitted a revised Statistical Analysis Plan (SAP) to the Food and Drug Administration ("FDA") for Part B that pre-specified a target population for the primary study analysis.

In June 2018, we announced that the results from Part B of the STEADFAST Study did not meet either co-primary efficacy endpoint. However, consistent with the findings in Part A and the Phase 2b trial, lower maximal plasma concentrations of *azeliragon* in Part B were associated with improvements in efficacy relative to placebo. Relying upon the program's Fast Track Designation status and study results to date, we are pursuing discussions with the FDA to propose a pathway for further clinical development in support of regulatory approval of *azeliragon*. On July 31, 2018, we submitted a full briefing book to the FDA in support of our request for a Type C meeting. Based upon FDA guidance, we expect either to meet with the FDA in person in October 2018 or receive written responses to our questions in September 2018.

We currently expect to continue to advance our diabetes drug candidates. *TTP399* is an orally administered, liver-selective glucokinase activator ("GKA"), for which we have completed our Phase 2b clinical trial in type 2 diabetes (the "AGATA Study") and are conducting an adaptive Phase 1b/2 clinical trial in type 1 diabetes (the "SimpliciT-1 Study"). *TTP273* is an orally administered, non-peptide agonist that targets the glucagon-like peptide-1 receptor ("GLP-1r"), for which we have completed a Phase 2 clinical trial in type 2 diabetes (the "LOGRA Study"), and that is currently being developed by Huadong under the Huadong License Agreement.

In addition to our diabetes drug candidates, we have two programs in various stages of preclinical and clinical development for the treatment of inflammatory disorders that have been out-licensed, either in whole or in part, and one program for which we are seeking a partner to further develop.

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

Our Alzheimer's Program – *Azeliragon*

Phase 3 STEADFAST Study

We initiated the STEADFAST Study in April 2015 pursuant to a Special Protocol Assessment ("SPA") with the FDA. The study was conducted in the United States and certain English-speaking foreign countries under a single protocol and was designed to enroll 800 mild AD patients in total, divided equally across two independent 400-patient sub-studies, in which each subject received either a 5 mg/day dose of *azeliragon* or placebo, randomized on a one-to-one basis, added to the standard of care. In April 2018, we announced that the results from Part A did not meet either co-primary efficacy endpoint. Patients taking *azeliragon* compared with placebo did not improve in cognitive or functional outcomes as measured by the Alzheimer's Disease Assessment Scale-cognitive subscale ("ADAS-cog") and the Clinical Dementia Rating Scale Sum of Boxes ("CDR-sb").

The STEADFAST Study was comprised of two independent and identical randomized, double-blind, placebo-controlled Phase 3 trials (Part A and Part B). The *azeliragon* treated group in Part A had a 4.4 point decline from baseline in ADAS-Cog and a 1.6 point decline from baseline in CDR-sb compared to a placebo decline of 3.3 points and 1.6 points, respectively. These differences were not statistically significant. *Azeliragon* was generally well-tolerated in Part A with a 25% withdrawal rate over 18 months that was similar in both the placebo and treatment arms. Following the April 2018 announcement of Part A topline results, we discontinued clinical trials involving *azeliragon*, including Part B of the STEADFAST study and open label extension.

On May 9, 2018, we announced that, based on post hoc analyses of the data from Part A of the STEADFAST Study, a subpopulation was identified that showed statistically significant benefit (unadjusted for multiple post hoc comparisons) from *azeliragon* relative to placebo on ADAS-cog. The identified subpopulation consisted of participants with peak *azeliragon* blood plasma concentration of less than 7.5 ng/mL and MMSE scores at baseline of 19-27 at 12 months. The patients in the identified subgroup (n=~48) had a -1.9 point improvement in ADAS-cog relative to the placebo group (n=200) which was statistically significant (unadjusted for multiple post hoc comparisons) ($p = 0.02$), and a 0.5 point improvement on CDR-sb relative to placebo ($p = .06$) despite the smaller sample size at 12 months. These findings are consistent with results from an earlier Phase 2b study of *azeliragon*, in which there was a dose response with improved results in patients who had lower concentrations of *azeliragon*. In contrast, participants in the Phase 2b and Part A of the STEADFAST Study with high *azeliragon* concentrations performed worse on the ADAS-cog relative to placebo.

At the time of the closure of Part B, a substantial number of participants completed 12 months of treatment under the study protocol. Based on the subpopulation data analyses from Part A and the prior *azeliragon* trials, we prepared and submitted a revised Statistical Analysis Plan (SAP) to the FDA for Part B that pre-specified a target population for the primary study analysis at 12 months.

In June 2018, we announced that the results from Part B did not meet either co-primary efficacy endpoint. However, consistent with the findings in Part A and the Phase 2b trial, lower maximal plasma concentrations of *azeliragon* in Part B were associated with improvements in efficacy relative to placebo. For example, when pooling the results of Part A and Part B and comparing change from baseline at 12 months, the azeliragon subgroup (n=88) had a -1.8 point improvement in ADAS-cog, a 0.4 improvement in CDR-sb and a 2.3 point improvement in Alzheimer's Disease Cooperative Study-Activities of Daily Living (ADCS-ADL) relative to placebo (n=373). Relying upon the program's Fast Track Designation status and study results to date, we are pursuing discussions with the Food and Drug Administration to propose a pathway for further clinical development in support of regulatory approval of *azeliragon*. On July 31, 2018, we submitted a full briefing book to the FDA in support of our request for a Type C meeting. Based upon FDA guidance, we expect either to meet with the FDA in person in October 2018 or receive written responses to our questions in September 2018.

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.

Development Outlook

To date, we have devoted substantially all of our resources to our research and development efforts relating to our drug candidates, including conducting clinical trials with our drug candidates, providing general and administrative support for these operations and protecting our intellectual property. We do not have any products approved for sale and have not generated any revenue from drug sales. From our inception through June 30, 2018, we have funded our operations primarily through a combination of private placements of common and preferred equity, research collaboration agreements, upfront and milestone payments for license agreements, debt financing and the completion of our initial public offering ("IPO") in August 2015.

We expect to continue to incur significant expenses and operating losses for at least the next several years. Our expenses will be impacted by many factors including the:

- outcome of our discussions with the FDA regarding the future development of *azeliragon* and what pathway for further clinical development in support of regulatory approval is determined to be appropriate, if any;
- wind-down the STEADFAST Study and its open label extension;
- continuance of our research and development activities and advancement of our clinical programs, including our diabetes programs, *TTP399* and *TTP273*; and
- maintenance, expansion and protection of our intellectual property portfolio.

To the extent our discussions with the FDA result in a path toward further development of *azeliragon*, our expenses, cash needs and operating losses may further increase.

We do not expect to generate revenue from drug sales unless and until we successfully complete development and obtain marketing approval for one or more of our drug candidates, which we expect will take a number of years and will be subject to significant uncertainty. Accordingly, we will need to raise additional capital prior to the commercialization of any of our drug candidates. Until such time that we can generate substantial revenue from product sales, we expect to finance our operating activities through a combination of equity offerings, debt financings, marketing and distribution arrangements and other collaborations, strategic alliances and licensing arrangements. Nevertheless, we may be unable to raise additional funds or enter into such other arrangements when needed, on favorable terms or at all, which would have a negative impact on our liquidity and financial condition and could force us to delay, reduce the scope or eliminate one or more of our research and development programs or commercialization efforts. Failure to receive additional funding could cause us to cease operations, in part or in full.

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 salaries, benefits and related overhead expenses for personnel in research and development functions and depreciation of leasehold improvements, laboratory equipment and computers. 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, 2018, we have incurred approximately $559.4 million in research and development expenses.

Our research and development expenses by project for the three and six months ended June 30, 2018 and 2017 were as follows (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Direct research and development expense:				
Azeliragon	$ 5,717	$ 6,715	$ 12,275	$ 14,785
TTP399	306	59	521	139
TTP273	10	101	33	281
Other projects	241	308	342	652
Indirect research and development expense	2,320	2,440	4,366	4,726
Total research and development expense	$ 8,594	$ 9,623	$ 17,537	$ 20,583

We expect to continue to incur research and development expenses as we wind down the STEADFAST Study and its open-label extension and as we further advance the development of our diabetes drug candidates, subject to the availability of additional funding. However, due to the termination of the STEADFAST Study and its open-label extension, we expect our overall research and development expense to decrease substantially. To the extent our discussions with the FDA result in a path toward further development of *azeliragon*, our expenses, cash needs and operating losses may further increase.

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

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

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

General and Administrative Expenses

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

Interest Expense

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

Results of Operations

Comparison of the three months ended June 30, 2018 and 2017

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, 2018	2017	Change
Revenue	$ 2,473	$ 13	$ 2,460
Operating expenses:			
Research and development	8,594	9,623	(1,029)
General and administrative	2,737	3,005	(268)
Total operating expenses	11,331	12,628	(1,297)
Operating loss	(8,858)	(12,615)	3,757
Interest income	16	33	(17)
Interest expense	(870)	(832)	(38)
Other income (expense), net	316	—	316
Loss before income taxes	(9,396)	(13,414)	4,018
Income tax provision	200	—	200
Net loss before noncontrolling interest	(9,596)	(13,414)	3,818
Less: net loss attributable to noncontrolling interest	(6,524)	(9,451)	2,927
Net loss attributable to vTv Therapeutics Inc.	$ (3,072)	$ (3,963)	$ 891

Revenue

Revenue was $2.5 million for the three months ended June 30, 2018 and was insignificant for the three months ended June 30, 2017. The revenue earned during the six months ended June 30, 2018 relates to the Huadong, Reneo and Newsoara License Agreements. We recognize the portion of the consideration received allocated to the license performance obligation for each of these agreements over the requisite knowledge transfer or research service periods in accordance with the applicable accounting guidance. The portion of revenue allocated to the other performance obligations under the license agreements will be recognized as performance occurs.

Research and Development Expenses

Research and development expenses were $8.6 million and $9.6 million for the three months ended June 30, 2018 and 2017, respectively. The decrease in research and development expenses during the period of $1.0 million, or 10.7%, was primarily due to:

- A decrease in clinical trial costs of $1.0 million for *azeliragon* which was mainly driven by a decrease of $0.5 million related to the termination of our STEADFAST and open-label extension ("OLE") studies in early April 2018. The costs incurred for these studies in the second quarter of fiscal 2018 were primarily attributable to the final visit and wind down of the studies;
- Additionally, there were decreases of approximately $0.6 million in costs related to other adjunct studies for *TTP488* being performed in the 2017 period;
- Further, decreases in compound manufacturing costs for *TTP488* of $0.4 million were offset by increases of $0.4 million related to the costs of consultants used to provide analysis of the results of the STEADFAST Study results;
- Costs related to *TTP399* in the second quarter of 2018 increased $0.2 million from the three months ended June 30, 2017, due to the initiation of the Simplici-T1 Study in the fourth quarter of 2017.

General and Administrative Expenses

General and administrative expenses were $2.7 million and $3.0 million for the three months ended June 30, 2018 and 2017, respectively. The decrease in general and administrative expenses during the period of $0.3 million, or 8.9%, was attributable to decreases in the amount of incentive compensation expected to be paid to our employees and decreases in professional fees in the 2018 period.

Interest Expense

Interest expense was $0.9 million and $0.8 million for the three months ended June 30, 2018 and 2017, respectively. Interest expense relates to the cash and non-cash interest for our Loan Agreement which bears interest at 10.5% plus the amount by which the one-month LIBOR exceeds 0.5%.

Comparison of the six months ended June 30, 2018 and 2017

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

(dollars in thousands) Statement of operations data:	Six Months Ended June 30, 2018	 2017	 Change
Revenue	$ 4,537	$ 43	$ 4,494
Operating expenses:			
Research and development	17,537	20,583	(3,046)
General and administrative	4,992	5,829	(837)
Total operating expenses	22,529	26,412	(3,883)
Operating loss	(17,992)	(26,369)	8,377
Interest income	34	60	(26)
Interest expense	(1,725)	(1,391)	(334)
Other income (expense), net	327	—	327
Loss before income taxes	(19,356)	(27,700)	8,344
Income tax provision	200	—	200
Net loss before noncontrolling interest	(19,556)	(27,700)	8,144
Less: net loss attributable to noncontrolling interest	(13,532)	(19,517)	5,985
Net loss attributable to vTv Therapeutics Inc.	$ (6,024)	$ (8,183)	$ 2,159

Revenue

Revenue was $4.5 million for the six months ended June 30, 2018 and was insignificant for the six months ended June 30, 2017. The revenue earned during the six months ended June 30, 2018 relates to the Huadong, Reneo and Newsoara License Agreements. We recognize the portion of the consideration received allocated to the license performance obligation for each of these agreements over the requisite knowledge transfer or research service periods in accordance with the applicable accounting guidance. The portion of revenue allocated to the other performance obligations under the license agreements will be recognized as performance occurs.

Research and Development Expenses

Research and development expenses were $17.5 million and $20.6 million for the six months ended June 30, 2018 and 2017, respectively. The decrease in research and development expenses during the period of $3.0 million, or 14.8%, was primarily due to:

- A decrease in clinical trial costs of $2.5 million for *azeliragon* which was mainly driven by a decrease of $1.7 million related to the termination of our STEADFAST and open-label extension ("OLE") studies in early April 2018;
- Additionally, costs related to other adjunct studies for *TTP488* decreased by $1.1 million as such studies were being performed in the 2017 period but were completed prior to the first half of 2018;
- Further, decreases in compound manufacturing costs for *TTP488* of $0.5 million were offset by increases of $0.7 million related to the costs of consultants used to provide analysis of the results of the STEADFAST Study results;
- Costs related to *TTP399* in the first quarter of 2018 increased $0.4 million from the six months ended June 30, 2017, due to the initiation of the Simplici-T1 Study in the fourth quarter of 2017.

General and Administrative Expenses

General and administrative expenses were $5.0 million and $5.8 million for the six months ended June 30, 2018 and 2017, respectively. The decrease in general and administrative expenses during the period of $0.8 million, or 14.4%, was primarily attributable to decreases in the amount of incentive compensation expected to be paid to our employees and decreases in professional fees incurred in the 2018 period.

Interest Expense

Interest expense was $1.7 million and $1.4 million for the six months ended June 30, 2018 and 2017, respectively. Interest expense relates to the cash and non-cash interest for our Loan Agreement which bears interest at 10.5% plus the amount by which the one-month LIBOR exceeds 0.5%. The increase in interest expense relates to the increased principal balance outstanding during the 2018 period as the second tranche of the Loan Agreement was funded in March 2017.

Liquidity and Capital Resources

Liquidity and Going Concern

As of June 30, 2018, we have an accumulated deficit of $206.5 million as well as a history of negative cash flows from operating activities. We anticipate that we will continue to incur losses for the foreseeable future as we continue our clinical trials. Further, we expect that we will need additional capital to continue to fund our operations. As of June 30, 2018, our liquidity sources included cash and cash equivalents of $1.2 million, the $1.7 million upfront payment receivable, net of applicable taxes, under our license agreement with Newsoara Biopharma Co., Ltd. ("Newsoara") (the "Newsoara License Agreement") and the $5.0 million of remaining funds available under the 2017 Letter Agreement. On July 30, 2018, we entered into another letter agreement with MacAndrews and Forbes Group LLC (the "2018 Letter Agreement"), which provides an additional $10.0 million of funding to us for our operations. Based on our current operating plan, we believe that our current cash and cash equivalents will allow us to meet our liquidity requirements through September 2018. These factors raise substantial doubt regarding our ability to continue as a going concern. In addition to available cash and cash equivalents, we are seeking possible partnering opportunities for our GKA, GLP-1r and other drug candidates which we believe may provide additional cash for use in our operations and the continuation of the clinical trials for our drug candidates. We are also pursuing other sources of additional financing to provide flexibility to our operating plan. The timing and availability of such additional financing is not yet known and the failure of the STEADFAST Study to meet either of its clinical endpoints may make it more difficult for us to obtain such financing.

Equity Financing

In December 2017, we entered into the 2017 Letter Agreement with MacAndrews. Under the 2017 Letter Agreement, until December 5, 2018, we have the right to sell to MacAndrews shares of our Class A Common Stock at a price equal to $4.38 per share, and MacAndrews has the right (exercisable up to three times) to require us to sell to it shares of Class A Common Stock at the same price. An aggregate of $10.0 million worth of Class A Common Stock may be sold under the 2017 Letter Agreement (whether at our or MacAndrews' option). In addition, in connection with the 2017 Letter Agreement, we also issued to MacAndrews warrants to purchase 198,267 shares of our Class A Common Stock at a price of $5.04 per share, exercisable until December 5, 2024. As of June 30, 2018, we had received funding of $5.0 million under the 2017 Letter Agreement and, in exchange, had issued a total of

1,141,552 shares of our Class A Common Stock. Subsequent to June 30, 2018, we received funding of $2.5 million under the 2017 Letter Agreement and issued an additional 570,776 shares of our Class A Common Stock in exchange.

In July 2018, we entered into the 2018 Letter Agreement with MacAndrews and Forbes Group LLC. Under the 2018 Letter Agreement, until July 30, 2019, we have the right to sell to MacAndrews shares of our Class A Common Stock at a price equal to $1.33 per share, and MacAndrews has the right (exercisable up to three times) to require us to sell to it shares of Class A Common Stock at the same price. An aggregate of $10.0 million worth of Class A Common Stock may be sold under the 2018 Letter Agreement (whether at our or MacAndrews' option). In addition, in connection with the 2018 Letter Agreement, we also issued MacAndrews warrants to purchase 518,654 shares of our Class A Common Stock at a price of $1.53 per share, exercisable until July 30, 2025.

Debt Transaction

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

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

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

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

The Loan Agreement includes customary affirmative and restrictive covenants, including, but not limited to, restrictions on the payment of dividends or other equity distributions and the incurrence of debt or liens upon the assets of the Company or its subsidiaries. The Loan Agreement does not contain any financial maintenance covenants other than a requirement to maintain a minimum cash balance of not less than $2.5 million in a deposit account pledged to secure the Loan Agreement and subject to an account control agreement. The minimum cash balance covenant was included as part of an amendment to the Loan Agreement in connection with our entry into the Huadong License Agreement in December 2017. The Loan Agreement includes customary events of default, including payment defaults, covenant defaults, and material adverse change default. Upon the occurrence of an event of default and following any applicable cure periods, a default interest rate of an additional 5.0% will be applied to the outstanding loan balances, and the Lenders may declare all outstanding obligations immediately due and payable and take such other actions as set forth in the Loan Agreement. As a result of the termination of the STEADFAST Study, we granted the Lenders a first priority security interest in all of our intellectual property, subject to certain limited exceptions.

Cash Flows

(dollars in thousands)	Six Months Ended June 30, 2018	2017
Net cash used in operating activities	$ (14,727)	$ (26,453)
Net cash provided by (used in) investing activities	12	(39)
Net cash provided by financing activities	3,958	7,500
Net decrease in cash and cash equivalents	$ (10,757)	$ (18,992)

Operating Activities

For the six months ended June 30, 2018, our net cash used in operating activities decreased $11.8 million from the six months ended June 30, 2017. The decreased use of cash was driven by both lower expenses in the first half of fiscal 2018 as well as the receipt of the upfront amounts due to us under the Huadong License Agreement and other changes in working capital.

Investing Activities

For the six months ended June 30, 2018 and 2017, net cash used in investing activities was insignificant.

Financing Activities

For the six months ended June 30, 2018, net cash provided by financing activities was impacted by the receipt of $5.0 million for the issuance of shares of our Class A Common Stock under the 2017 Letter Agreement. Such receipts were offset by $1.0 million of principal payments required by our Loan Agreement. For the six months ended June 30, 2017, net cash provided by financing activities was $7.5 million, as we borrowed the second tranche under our Loan Agreement.

Future Funding Requirements

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

Based on our current operating plan, we believe that our current cash and cash equivalents and other committed sources of funds under the 2017 Letter Agreement and the 2018 Letter Agreement will allow us to meet our liquidity requirements through September 2018. In addition to the available cash and cash equivalents and other sources of liquidity, we are seeking possible additional partnering opportunities for our GKA, GLP-1r and other drug candidates which we believe may provide additional cash for use in our operations and the continuation of the clinical trials for our drug candidates. We may also pursue other sources of financing to provide flexibility to our operating plan. The timing and availability of such financing is not yet known and the failure of the STEADFAST Study to meet either of its co-primary endpoints may make it more difficult for us to obtain such financing. 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 extent of costs associated with the wind-down of the STEADFAST Study and the OLE, as well as work required to complete the analysis of Part B data;
- the outcome of our discussions with the FDA regarding the future development of *azeliragon* and what pathway for further clinical development in support of regulatory approval is determined to be appropriate, if any;
- the outcome, costs and timing of seeking and obtaining FDA and any other regulatory approvals;
- the number and characteristics of drug candidates that we pursue, including our drug candidates in preclinical and clinical development;
- the ability of our drug candidates to progress through clinical development successfully;

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

Until such time, if ever, as we can generate substantial revenue from drug sales, we expect to finance our cash needs through a combination of equity offerings, debt financings, marketing and distribution arrangements and other collaborations, strategic alliances and licensing arrangements. We do not currently have any committed external source of funds other than those available through the 2017 Letter Agreement and the 2018 Letter Agreement. To the extent that we raise additional capital through the sale of equity or convertible debt securities, the ownership interests of our common stockholders will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect the rights of our common stockholders. Debt financing and preferred equity financing, if available, may involve agreements that include covenants that will further limit or restrict our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. If we raise additional funds through collaborations, strategic alliances or marketing, distribution or licensing arrangements with third parties, we may be required to relinquish valuable rights to our technologies, future revenue streams or drug candidates or grant licenses on terms that may not be favorable to us. If we are unable to obtain additional funding, we could be forced to delay, reduce or eliminate our research and development programs or commercialization efforts, which could adversely affect our business prospects.

Disclosures About Contractual Obligations and Commitments

As of June 30, 2018, there were no material changes to our total contractual cash obligations, as set forth in the contractual obligations and commitments disclosure included in Part II, Item 7. “Management’s Discussion and Analysis of Financial Condition and Results of Operations” of our Annual Report on Form 10-K for the year ended December 31, 2017.

We enter into contracts in the normal course of business with CROs for clinical trials and clinical supply manufacturing and with vendors for preclinical research studies and other services and products for operating purposes, which generally provide for termination or cancellation within 30 days of notice.

Off-Balance Sheet Arrangements

In December 2017, we entered into the 2017 Letter Agreement with MacAndrews to provide additional funding for our operations. Under the 2017 Letter Agreement, until December 5, 2018, we have the right to sell to MacAndrews shares of our Class A Common Stock at a price equal to $4.38 per share, and MacAndrews has the right (exercisable up to three times) to require us to sell to it shares of Class A Common Stock at the same price. An aggregate of $10.0 million worth of Class A Common Stock may be sold under the 2017 Letter Agreement (whether at our or MacAndrews’ option). In addition, in connection with the 2017 Letter Agreement, we also issued MacAndrews warrants to purchase 198,267 shares of our Class A Common Stock at a price of $5.04 per share, exercisable until December 5, 2024. As of June 30, 2018 we had received funding of $5.0 million under the 2017 Letter Agreement and, in exchange, had issued a total of 1,141,552 shares of our Class A Common Stock.

In July 2018, we entered into the 2018 Letter Agreement with MacAndrews and Forbes Group LLC. Under the 2018 Letter Agreement, until July 30, 2019, we have the right to sell to MacAndrews shares of our Class A Common Stock at a price equal to $1.33 per share, and MacAndrews has the right (exercisable up to three times) to require us to sell to it shares of Class A Common Stock at the same price. An aggregate of $10.0 million worth of Class A Common Stock may be sold under the 2018 Letter Agreement (whether at our or MacAndrews’ option). In addition, in connection with the 2018 Letter Agreement we also issued MacAndrews warrants to purchase 518,654 shares of our Class A Common Stock at a price of $1.53 per share, exercisable until July 30, 2025.

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, 2017. Significant changes made to our critical accounting policies and estimates in 2018 with respect to our adoption of Accounting Standards Codification Topic 606 “Revenue From Contracts with Customers” are discussed within Note 2 of the Condensed Consolidated Financial Statements included in Item 1 of this Quarterly Report on Form 10-Q.

Forward-Looking Statements

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

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

Effect of Recent Accounting Pronouncements

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

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Interest Rate Risk

Our Loan Agreement bears interest at a floating rate equal to 10.5% plus the amount by which the one-month LIBOR exceeds 0.5%. A one percent increase in the variable rate of interest on the Loan Agreement would increase interest expense by approximately $0.2 million annually based on the amounts currently outstanding. We do not currently hedge our interest rate exposure.

Market Risk

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

Foreign Currency Risk

We do not have any material foreign currency exposure.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Under the supervision and with the participation of our Chief Executive Officer and Chief Financial Officer, management has evaluated the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rules 13a-15(e) or 15d-15(e) of the Securities Exchange Act of 1934) as of June 30, 2018. Based upon that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that, as of June 30, 2018, our disclosure controls and procedures were effective in causing material information relating to us (including our consolidated subsidiaries) to be recorded, processed, summarized and reported by management on a timely basis and to ensure the quality and timeliness of our public disclosures pursuant to SEC disclosure obligations.

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

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

Changes to Internal Control over Financial Reporting

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

Website Availability of Reports and other Corporate Governance Information

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

PART II – OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

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

ITEM 1A. RISK FACTORS

In addition to the risk factors listed below and other information in this report, investors should carefully consider the risk factors set forth under the heading "Risk Factors" under Item 1A of Part I in our Annual Report on Form 10-K for the year ended December 31, 2017.

We may not be able to continue the development of, obtain regulatory approval for, or successfully commercialize azeliragon.

We have expended considerable resources and efforts on the development of *azeliragon*. In April 2018, we announced that results from Part A of our Phase 3 STEADFAST Study of the investigational medication *azeliragon* (TTP488) in people with mild

Alzheimer's disease (the "STEADFAST Study") did not meet either co-primary efficacy endpoint as required by the Special Protocol Agreement ("SPA") with the FDA. Following the April 2018 announcement, we discontinued clinical trials involving *azeliragon*, including Part B and open label extension.

In May 2018, we announced that based on post hoc analyses of the data from Part A of the STEADFAST Study, a subpopulation was identified that showed statistically significant benefit (unadjusted for multiple post hoc comparisons) from *azeliragon* relative to placebo on ADAS-cog. The identified subpopulation consisted of participants with peak *azeliragon* blood plasma concentration of less than 7.5 ng/mL and MMSE scores at baseline of 19-27 at 12 months. The patients in the identified subgroup (n=~48) had a -1.9 point improvement in ADAS-cog relative to the placebo group (n=200) which was statistically significant (unadjusted for multiple post hoc comparisons) (p = 0.02), and a 0.5 point improvement on CDR-sb relative to placebo (p = .06) despite the smaller sample size. This benefit was observed at 12 months. These findings are consistent with results from an earlier Phase 2b study of *azeliragon*, in which there was a dose response with improved results in patients who had lower concentrations of *azeliragon*. In contrast, participants in the Phase 2b and Part A of the STEADFAST Study with high *azeliragon* concentrations performed worse on the ADAS-cog relative to placebo.

At the time of the closure of Part B, a substantial number of participants will have completed 12 months of treatment under the study protocol. We used the subpopulation data analyses from Part A and prior *azeliragon* trials to prepare and file a revised Statistical Analysis Plan (SAP) to the Food and Drug Administration for Part B that pre-specified a target population for the primary study analysis.

In June 2018, we announced that the results from Part B did not meet either co-primary efficacy endpoint. However, consistent with the findings in Part A and the Phase 2b trial, lower maximal plasma concentrations of *azeliragon* in Part B were associated with improvements in efficacy relative to placebo. For example, when pooling the results of Part A and Part B and comparing change from baseline at 12 months, the azeliragon subgroup (n=88) had a 1.8 point improvement in ADAS-cog, a 0.4 improvement in CDR-sb and a 2.3 point improvement in Alzheimer's Disease Cooperative Study-Activities of Daily Living (ADCS-ADL) relative to placebo (n=373). Relying upon the program's Fast Track Designation status and study results to date, we are pursuing expedited discussions with the Food and Drug Administration to propose a pathway for further clinical development in support of regulatory approval of *azeliragon*. On July 31, 2018, we submitted a full briefing book to the FDA in support of our request for a Type C meeting. Based upon FDA guidance, we expect either to meet with the FDA in person in October 2018 or receive written responses to our questions in September 2018.

The failure of Part A of our STEADFAST clinical trial to meet its co-primary endpoints is expected to delay the potential commercialization of *azeliragon* and may make such commercialization more difficult, or impossible. Even if the subpopulation that showed benefit is confirmed as a prespecified analysis for Part B, we will likely need to do additional clinical and non-clinical work to be able to continue to develop and commercialize *azeliragon*. Specifically, we may need to commence and complete additional clinical trials that satisfy the specified primary endpoint criteria, manage clinical and manufacturing activities, obtain necessary regulatory approvals from the FDA and comparable regulatory authorities elsewhere, and, if approved, successfully market and commercialize *azeliragon*. If we continue with the development of *azeliragon*, there is no guarantee that we will be able to successfully complete these steps, and if we do not continue with the development of *azeliragon*, then we may not be able to continue our business in its current form and will be required to pursue alternative business strategies. As an organization, we have never completed a successful Phase 3 clinical trial or submitted a New Drug Application before, and we may be unsuccessful in doing so for *azeliragon*.

We require additional funding and there is a substantial doubt about our ability to continue as a going concern; if we fail to raise additional funding we will cease operations and/or seek protection under applicable bankruptcy laws.

We require additional financing in order to continue to fund operations, and there is a substantial doubt about our ability to continue as a going concern. No assurance can be given that we will be successful in obtaining any such financing on acceptable terms, if at all, or if secured, that such financing will provide for funding or payments to us sufficient to continue to fund operations. After giving effect to our existing sources of liquidity, including the 2017 Letter Agreement and the 2018 Letter Agreement, we believe we have cash sufficient to fund operations only into September 2018. In the absence of the receipt of additional financing prior to such time, we will be required to scale back or terminate operations and/or seek protection under applicable bankruptcy laws.

Our recurring losses, accumulated deficit and our current levels of cash and cash equivalents raise substantial doubt about our ability to continue as a going concern as of the date of this report. If we are unable to continue as a going concern, we may have to liquidate our assets and it is likely that investors will lose all or a significant part of their investments. If we seek additional financing to fund our business activities in the future and there remains substantial doubt about our ability to continue as a going concern, investors or other financing sources may be unwilling to provide additional funding to us on commercially reasonable terms or at all, and such additional funding may cause substantial dilution to our existing investors. Further, if adequate funds are not available, we may be required to delay, reduce the scope of or eliminate one or more of our research or development programs.

Our stock price may decline and we may not be able to maintain compliance with NASDAQ listing requirements

Our common stock is listed on The NASDAQ Global Market, which imposes, among other requirements, a minimum market value and minimum bid requirement. If the market value of our listed securities ("MVLS") remains below $50.0 million or if the closing bid price for our common stock remains below $1.00 per share for thirty consecutive business days, NASDAQ may send us a notice stating that we will be provided a period of 180 days to regain compliance with the minimum market value or minimum bid requirement. If such compliance is not regained, NASDAQ may make a determination to delist our common stock.

On May 2, 2018, we received notification from NASDAQ that we were not in compliance with the MVLS requirement. In accordance with the applicable NASDAQ Listing Rules, we have 180 calendar days, or until October 29, 2018, to regain compliance with the MVLS requirement. Compliance can be achieved automatically and without further action if the MVLS is at or above $50 million for a minimum of 10 consecutive business days at any time during the 180-day period.

Further on June 1, 2018, we received notification from NASDAQ that we were not in compliance with the requirement that the market value of our publicly held shares ("MVPHS") remain above $15 million. In accordance with the applicable NASDAQ Listing Rules, we have 180 calendar days, or until November 28, 2018, to regain compliance with the MVPHS requirement. Compliance can be achieved automatically and without further action if the MVPHS is at or above $15 million for a minimum of 10 consecutive business days at any time during the 180-day period.

There is no assurance that we will be able to regain compliance with these NASDAQ rules.

The delisting of our common stock from NASDAQ may make it more difficult for us to raise capital on favorable terms or at all in the future. Such a delisting would likely have a negative effect on the price of our common stock and would impair your ability to sell or purchase our common stock when you wish to do so. Further, if we were to be delisted from The NASDAQ Global Market, our common stock would cease to be recognized as covered securities and we would be subject to regulation in each state in which the Company offers its securities.

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, 2018 that have not previously been included in a Current Report on Form 8-K.

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

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

ITEM 4. MINE SAFETY DISCLOSURES

None.

ITEM 5. OTHER INFORMATION

None.

ITEM 6. EXHIBITS

Exhibit Number	Description
10.1†††	License Agreement, dated as of May 31, 2018, by and between Newsoara Biopharma Co., Ltd. and vTv Therapeutics LLC.
10.2	Form of Securities Purchase Agreement to Purchase Class A Common Stock, by and between MacAndrews & Forbes Group LLC and vTv Therapeutics LLC.
31.1	Certification of President and Chief Executive Officer required by Rule 13a-14(a)/15d-14(a) under the Securities Exchange Act of 1934, as amended, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of Chief Financial Officer required by Rule 13a-14(a)/15d-14(a) under the Securities Exchange Act of 1934, as amended, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certification of President and Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema
101.CAL	XBRL Taxonomy Extension Calculation Linkbase
101.DEF	XBRL Taxonomy Extension Definition Document
101.LAB	XBRL Taxonomy Extension Label Linkbase
101.PRE	XBRL Taxonomy Extension Presentation Linkbase

††† Confidential treatment requested with respect to portions of this exhibit.

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 3, 2018

VTV THERAPEUTICS INC.
(Registrant)

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

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

Exhibit 10.1

EXECUTION COPY

LICENSE AGREEMENT

BY AND BETWEEN

NEWSOARA BIOPHARMA CO., LTD.

AND

VTV THERAPEUTICS LLC

DATED AS OF MAY 31, 2018

*** Confidential treatment has been requested with respect to portions of this agreement as indicated by "[***]" and such confidential portions have been deleted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.**

TABLE OF CONTENTS

LICENSE AGREEMENT

THIS LICENSE AGREEMENT is entered into this 31st day of May 2018 (the "Effective Date"), by and between Newsoara Biopharma Co., Ltd., a company organized under the laws of China, having a business address at Room 302-22, Building No. 1, 800 Na Xian Road, Shanghai Free Trade Zone, China ("Newsoara"), and vTv Therapeutics LLC, a limited liability company organized under the laws of Delaware, having a business address at 4170 Mendenhall Oaks Parkway, High Point, NC 27265 ("vTv").

WHEREAS, vTv has developed or obtained rights to vTv Know-How, vTv Patent Rights and vTv Compounds, which are PDE4 Inhibitors, including HPP737 (each as defined below); and

WHEREAS, Newsoara desires to obtain a license under the vTv Patent Rights and the vTv Know-How to Develop and Commercialize Compounds and Products in the Field in the Territory (each as defined below), under the terms and conditions set forth herein, and vTv desires to grant such a license.

NOW, THEREFORE, 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"Adverse Event". Adverse Event means any unwanted or harmful medical occurrence in a patient or subject who is administered a Product, whether or not considered related to such Product, including any undesirable sign (including abnormal laboratory findings of clinical concern), symptom or disease temporally associated with the use of such Product.

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 contract or otherwise), or (b) at least 50% of the voting securities (whether directly or pursuant to any vested and exercisable option, warrant or other similar arrangement) or other comparable equity interests. For clarity, neither of the Parties shall be deemed to be an "Affiliate" of the other. For clarity, Yusongyuan Pharmaceuticals Co., Ltd., a company organized under the laws of China, having a business address at No. 1, Song Jiang Road, Luo He, Henan Province, China, is Newsoara's Affiliate.

1.3"Bankruptcy Code". Bankruptcy Code means Title 11 of the US 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 or Shanghai are authorized by Law to remain closed.

1.5“Calendar Quarter”. Calendar Quarter means each of the periods ending on March 31, June 30, September 30 and December 31 of any Calendar Year.

1.6“Calendar Year”. Calendar Year means each calendar year during the Term.

1.7“cGMP”. cGMP means all applicable current Good Manufacturing Practices including, as applicable, (a) the principles detailed in the U.S. Current Good Manufacturing Practices, 21 C.F.R. Parts 4, 210, 211, 601, 610 and 820, (b) European Directive 2003/94/EC and Eudralex 4, (c) the principles detailed in the ICH Q7 guidelines, and (d) the equivalent applicable Laws in any relevant country or region (including but not limited to any Region in the Territory), each as may be amended and applicable from time to time.

1.8“Combination Product”. Combination Product means (a) any pharmaceutical product that is a single formulation consisting of a Compound as an active ingredient and one or more other active compounds or active ingredients, which other active compounds or active ingredients are not Compounds, are not Covered by a vTv Patent Right, and do not embody any vTv Know-How, in all such cases prior to such other active compound or active ingredient being combined with such Compound (“Other API”) or (b) any combination of a Compound sold together with any separately formulated Other API for a single invoiced price.

1.9“Commercialization” or “Commercialize”. Commercialization or Commercialize means activities directed to obtaining pricing and reimbursement approvals, marketing, promoting, Manufacturing commercial supplies of, distributing, importing, offering for sale or selling a product.

1.10“Commercially Reasonable Efforts”. Commercially Reasonable Efforts means, with respect to an objective, the reasonable, diligent, good faith efforts of a Party to accomplish such objective that a company would normally use to accomplish a similar objective under similar circumstances, and, specifically with respect to obligations hereunder relating to a Compound or Product, the carrying out of such obligations with those efforts and resources that a pharmaceutical company would use were it Developing or Commercializing its own pharmaceutical products that are of similar market potential at a similar stage in development or product life as the Compound or Product, taking into account product labeling or anticipated labeling, present and future market potential, past performance of the Compound or Product, financial return, medical and clinical considerations, present and future regulatory environment and competitive Third Party products, all as measured by the facts and circumstances at the time such efforts are due, without giving any other product owned by such Party or over which it has or may acquire rights any preferential treatment when compared to the objectives to be carried out hereunder.

1.11“Competing Product”. Competing Product means a product, other than a Product, that has PDE4 Inhibition as its primary therapeutic mechanism of action.

1.12"Compound". Compound means any vTv Compound and each prodrug, solvate, hydrate, ester, salt stereoisomer, racemate, tautomer, polymorph, isomer, enantiomer, free acid form, free base form, crystalline form, co-crystalline form, amorphous form, chelate, or optically active form and metabolite thereof, provided that any such metabolite has functional, *in vivo*, PDE4 Inhibition as its therapeutic mechanism of action.

1.13"Control" or "Controlled". Control or Controlled means, with respect to any tangible property or intellectual property right or other intangible 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 to such tangible property or access, a license, sublicense or right of reference, or other rights to such intellectual property right or other intangible property, as provided herein without violating the terms of any agreement with any Third Party.

1.14"Cover", "Covering" or "Covered". Cover, Covering or Covered means, with respect to a compound, product, technology, process or method that, in the absence of ownership of or a license granted under a Valid Claim, the manufacture, use, offer for sale, sale or importation of such compound or product or the practice of such technology, process or method would infringe such Valid Claim (or, in the case of a Valid Claim that has not yet issued, would infringe such Valid Claim if it were to issue without modification).

1.15"CTA". CTA means the clinical trial application approval granted by the SDA or an equivalent approval granted by an applicable Regulatory Authority in a Region of the Territory other than Mainland China, for conducting a clinical trial on human subjects for a Compound or Product in accordance with applicable Laws.

1.16"Development" or "Develop". Development or Develop means pre-clinical and clinical drug research, discovery and development activities, including toxicology and other pre-clinical development efforts, stability testing, process development, compound property optimization, formulation development, delivery system development, quality assurance and quality control development, statistical analysis, clinical pharmacology, Manufacturing supplies of compounds and products for pre-clinical and clinical use, 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).

1.17"Development Plan". Development Plan means the plan for the Development of Products in the Field in the Territory as it may be modified from time to time in accordance with this Agreement. The initial Development Plan will be agreed by the JDC and attached hereto as Schedule 1.17 within ninety (90) days after the Effective Date.

1.18"FDA". FDA means the US Food and Drug Administration and any successor agency.

1.19"Field". Field means all therapeutic uses in humans.

1.20"First Commercial Sale". First Commercial Sale means, with respect to a Product in a Region of the Territory, the first shipment of a Product in commercial quantities for commercial sale by Newsoara, its Affiliates or its Sublicensees to a Third Party.

1.21“GCP”. GCP means all applicable Good Clinical Practice standards for the design, conduct, performance, monitoring, auditing, recording, analyses and reporting of clinical trials, including, as applicable (a) as set forth in the International Conference on Harmonization of Technical Requirements for Registration of Pharmaceuticals for Human Use Harmonized Tripartite Guideline for Good Clinical Practice (CPMP/ICH/135/95) and any other guidelines for good clinical practice for trials on medicinal products in the Territory, (b) the Declaration of Helsinki (2004) as last amended at the 52nd World Medical Association in October 2000 and any further amendments or clarifications thereto, (c) U.S. Code of Federal Regulations Title 21, Parts 50 (Protection of Human Subjects), 56 (Institutional Review Boards) and 312 (Investigational New Drug Application), as may be amended from time to time, and (d) the equivalent applicable Laws in any Region in the Territory, each as may be amended and applicable from time to time and in each case, that provide for, among other things, assurance that the clinical data and reported results are credible and accurate and protect the rights, integrity, and confidentiality of trial subjects.

1.22“GLP”. GLP means all applicable Good Laboratory Practice standards, including, as applicable, as set forth in the then current good laboratory practice standards promulgated or endorsed by the U.S. Food and Drug Administration as defined in 21 C.F.R. Part 58, or the equivalent applicable Laws in any Region in the Territory, each as may be amended and applicable from time to time.

1.23“Generic Competition”. Generic Competition means, with respect to a Product in any Region of the Territory in a given Calendar Quarter, that, during such Calendar Quarter, one or more Generic Products shall be commercially available in such Region and sold by a Third Party not authorized by Newsoara or any of its Affiliates, and such Generic Products shall have a market share of at least [***] of the aggregate market share of Products and Generic Products (based on data provided by IMS International, or if such data is not available, such other reliable data source as reasonably determined by Newsoara in consultation with vTv) as measured by unit volume.

1.24“Generic Product”. Generic Product means, with respect to a given Product, any pharmaceutical preparation that contains a Compound as its active pharmaceutical ingredient and (a) is approved for sale in reliance, in whole or in part, on the prior approval (or on safety or efficacy data submitted in support of the prior approval) of such Product as determined by the applicable Regulatory Authority or is approved for sale in reliance, in whole or in part, on the existing drug standard already approved by the applicable Regulatory Authority, or (b) is otherwise substitutable for such Product under applicable Laws by a pharmacist without the intervention of the prescribing physician.

1.25“Governmental Authority”. Governmental Authority means any US 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.

1.26“GSP”. GSP means all applicable Good Supply Practice standards, including, as applicable, as set forth in the then current good supply practice standards promulgated or endorsed by the SDA as defined in Good Supply Practice for Pharmaceutical Products or the equivalent applicable Laws in any Region in the Territory, each as may be amended and applicable from time to time.

1.27“Hong Kong”. Hong Kong means the Hong Kong Special Administrative Region of the PRC.

1.28“HPP737”. HPP737 means the molecule identified on Schedule 1.28. For purposes of clarity, HPP737 shall be deemed to be a PDE4 Inhibitor.

1.29“Initiate”. Initiate means to submit an application to either a Regulatory Authority or Institutional Review Board (“IRB”) to conduct a Phase II Clinical Trial or Phase III Clinical Trial, as applicable, of a Compound or Product in the Territory.

1.30“Joint Intellectual Property”. Joint Intellectual Property means the Joint Inventions and Joint Patent Rights.

1.31“Know-How”. Know-How means proprietary or non-public information or materials, whether patentable or not, including (a) ideas, discoveries, inventions, improvements or trade secrets, (b) pharmaceutical, chemical or biological materials, products or compositions, (c) tests, assays, techniques, data, methods, procedures, formulas or processes, (d) technical, medical, clinical, toxicological or other scientific data or other information relating to any of the foregoing, and (e) drawings, plans, designs, diagrams, sketches, specifications or other documents containing or relating to such information or materials.

1.32“Law” or “Laws”. Law or Laws means all laws, statutes, rules, regulations, orders, judgments or ordinances of any Governmental Authority.

1.33“Legal Exclusivity”. Legal Exclusivity means, with respect to a Product and a Region, that (a) a Valid Claim included within a vTv Patent Right or Joint Patent Right Covers such Product in such Region, or (b) data exclusivity rights, orphan drug designation or other similar exclusivity rights have been conferred as to such Product by a Regulatory Authority or other applicable Governmental Authority and are effective in such Region.

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

1.35“Macau”. Macau means the Macau Special Administrative Region of the PRC.

1.36“Mainland China”. Mainland China means, for the purpose of this Agreement, the territory of the PRC, excluding Hong Kong, Macau and Taiwan.

1.37"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.

1.38"NDA". NDA means a new drug application or application for market approval filed with the SDA with respect to a Compound or Product, or an equivalent application filed with the Regulatory Authority of a Region in the Territory other than Mainland China, in accordance with the applicable Laws.

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

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

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

(d) Amounts actually allowed or credited on returns of sales of Products by Newsoara, its Affiliates or their Sublicensees.

If a Product is sold as part of a Combination Product, Net Sales will be the product of (x) Net Sales of the Combination Product calculated as above (i.e., calculated as for a non-Combination Product) and (y) the fraction (A/(A+B)), where:

(i) A is [***]; and

(ii) B is [***].

If A or B cannot be determined by reference to non-Combination Product sales as described above, then Net Sales for purposes of determining royalty payments will be calculated as above, but [***] shall be determined by mutual agreement reached in good faith by the Parties prior to the end of the accounting period in question based on an equitable method of determining same that takes into account, in the applicable Region, variations in dosage units and the relative fair market value of each therapeutically active ingredient in the Combination Product. If the Parties are unable to reach such an agreement prior to the end of the applicable accounting period, then the Parties will refer such matter to a jointly selected Third Party with expertise in the pricing of pharmaceutical products that is not an employee, consultant, legal advisor, officer, director or stockholder of, and does not have any conflict of interest with respect to, either Party for resolution.

1.40“Newsoara Know-How”. Newsoara Know-How means all Know-How Controlled as of the Effective Date or thereafter during the Term by Newsoara and its Subsidiaries (other than any Know-How included in Joint Intellectual Property) and that is used by Newsoara or any of its Affiliates in the Development, Manufacture or Commercialization of any Compound or Product.

1.41“Newsoara Patent Rights”. Newsoara Patent Rights means all Patent Rights Controlled as of the Effective Date or thereafter during the Term by Newsoara and its Subsidiaries (other than Joint Patent Rights) and that Cover the Development, Manufacture or Commercialization of any Compound or Product as such Development, Manufacture or Commercialization is conducted by Newsoara or any of its Affiliates consistent with this Agreement.

1.42“Party”. Party means either vTv or Newsoara; “Parties” means both vTv and Newsoara.

1.43“Patent Rights”. Patent Rights means the rights and interest in and to all issued patents and pending patent applications in any country or region, including all provisionals, divisionals, continuations, renewals, continuations-in-part, patents of addition, re-examination, supplementary protection certificates, extensions, registrations or confirmation patents, restoration of patent terms, letters of patent, and reissues thereof.

1.44“Payments”. Payments means royalties, milestones and other amounts payable by Newsoara to vTv pursuant to this Agreement.

1.45“PDE4 Inhibition”. PDE4 Inhibition means phosphodiesterase type 4 inhibition.

1.46“PDE4 Inhibitor”. PDE4 Inhibitor means a phosphodiesterase type 4 inhibitor.

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

1.48“Phase II Clinical Trial”. Phase II Clinical Trial means a human clinical trial in any Region in the Territory, the principal purpose of which is a determination of safety and efficacy in the target patient population or a similar clinical study prescribed by the Regulatory Authorities pursuant to the applicable Laws or otherwise, which trial does not prospectively meet the definition of a Phase III Clinical Trial.

1.49“Phase III Clinical Trial”. Phase III Clinical Trial means a human clinical trial in any Region in the Territory as required by the Regulatory Authority to establish that a pharmaceutical product is safe and efficacious for its intended use and to determine warnings, precautions, and adverse reactions that are associated with such pharmaceutical product in the dosage range to be prescribed, which trial is intended to support marketing approval of such Product pursuant to applicable Law.

1.50“PRC”. PRC means the People’s Republic of China.

1.51"Product". Product means any pharmaceutical preparation containing one or more Compounds as its only active ingredient(s) or any Combination Product.

1.52"Regulatory Approval". Regulatory Approval means an approval by the applicable Regulatory Authority of an NDA.

1.53"Regulatory Authority". Regulatory Authority means any Governmental Authority, including but not limited to the SDA or the equivalent regulatory body in a Region other than Mainland China, with responsibility for granting licenses or approvals necessary for the marketing and sale of pharmaceutical products in a country or region.

1.54"Regulatory Filing(s)". Regulatory Filing(s) means all (i) applications, registrations, licenses, authorizations, and approvals (including Regulatory Approvals, CTA, NDA and other regulatory filings); (ii) correspondence and reports submitted to or received from Regulatory Authorities during Development or Commercialization (including minutes and official contact reports relating to any communications with any Regulatory Authority) and all supporting documents with respect thereto, including all regulatory drug lists, advertising and promotion documents, adverse event files, regulatory inspections, and complaint files; and (iii) clinical data and data contained or relied upon in any of the foregoing, in each case ((i), (ii), and (iii)) relating to a Product.

1.55"Related Party". Related Party means (a) with respect to vTv, vTv's Affiliates or any of its Third Party Licensees, and (b) with respect to Newsoara, Newsoara's Affiliates and permitted Sublicensees.

1.56"SDA". SDA means the State Drug Administration, including any of its predecessor, successor agency and local counterparts in Mainland China.

1.57"Senior Executive". Senior Executive means, with respect to vTv, the Chief Executive Officer of vTv, or his or her designee, and, with respect to Newsoara, the Chief Executive Officer of Newsoara, or his or her designee. "Senior Executives" means the applicable officers of vTv and Newsoara.

1.58"Sublicensee". Sublicensee means a Third Party that has been granted a sublicense under the rights granted to Newsoara pursuant to Section 2.1 of this Agreement. Third Parties that are permitted only to (a) distribute and resell a Product, (b) re-package a Product for resale, or (c) Manufacture a Compound or Product for supply to Newsoara, its Affiliates or its Sublicensees (and have no other rights to Develop or Commercialize such Compound or Product) are not "Sublicensees".

1.59"Subsidiary". Subsidiary means, with respect to any specified Person, any entity that the specified Person (either alone or through or together with any other Subsidiary of such specified Person) directly or indirectly controls; provided, that the Subsidiaries of vTv shall be deemed to include the Subsidiaries of vTv Therapeutics Inc. other than vTv and the Subsidiaries of Newsoara shall be deemed to include Yusongyuan Pharmaceuticals Co., Ltd. and its Subsidiaries. For purposes of this definition, "control" 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 contract or otherwise), or (b) at least 50% of the voting securities (whether directly or pursuant to any vested and exercisable option, warrant or other similar arrangement) or other comparable equity interests.

1.60"Territory". Territory means, for the purpose of this Agreement, (i) Mainland China, (ii) Hong Kong, (iii) Macau, (iv) Taiwan, (v) Thailand, (vi) Vietnam, (vii) Indonesia, (viii) Malaysia, (ix) Philippines, (x) Singapore, (xi) Myanmar (Burma), (xii) Cambodia, (xiii) Laos, (xiv) Brunei, and (xv) South Korea, each respectively a "Region".

1.61"Third Party". Third Party means any Person other than vTv or Newsoara or any of their respective Affiliates.

1.62 "Third Party Licensee". Third Party Licensee means vTv's licensees of the vTv Intellectual Property.

1.63"US". US means the United States of America.

1.64"Valid Claim". Valid Claim means any claim from (a) an issued and unexpired patent that has not been revoked or held unenforceable or invalid by a final decision of a court or other Governmental Authority of competent jurisdiction, or that has not been disclaimed, denied or admitted to be invalid or unenforceable through reissue or disclaimer or otherwise; or (b) a patent application; provided that such a claim within a patent application has not been canceled, withdrawn, or abandoned or been pending for more than [***] years from the date of its first priority filing in the applicable country or region. For clarity, a claim of a patent that, pursuant to clause (b), had ceased to be a Valid Claim before it issued but that subsequently issues and is otherwise described by clause (a), shall again be considered to be a Valid Claim once it issues until it is no longer considered a Valid Claim in accordance with clause (a). For the purpose of Section 6.5, if a patent application has been pending for more than [***] years from the date of its first priority filing in the applicable country or region matures into an issued patent after the expiration of the Royalty Term in the applicable country or region, such issued patent thereof shall not be counted as a Valid Claim in such country or region.

1.65"vTv Compound". vTv Compound means any compound that (a) is Controlled by vTv as of the Effective Date and (b) is a PDE4 Inhibitor, including HPP737 and any backup compound thereto.

1.66"vTv Intellectual Property". vTv Intellectual Property means the vTv Know-How and the vTv Patent Rights.

1.67"vTv Know-How". vTv Know-How means all Know-How that is Controlled by vTv or any of its Subsidiaries as of the Effective Date or thereafter during the Term (other than any Know-How included in Joint Intellectual Property) relating to, or that is necessary or useful for, the Development, Manufacture or Commercialization of vTv Compounds or Products.

1.68"vTv Patent Rights". vTv Patent Rights means all Patent Rights that are Controlled by vTv or any of its Subsidiaries as of the Effective Date or thereafter during the Term (other than Joint Patent Rights) relating to, or that is necessary or useful for, the

Development, Manufacture or Commercialization of vTv Compounds or Products. The vTv Patent Rights in the Territory existing as of the Effective Date are set forth on Schedule 1.68.

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

Definition:	**Section:**
Abandoned Joint Patents	Section 7.2(b)
Abandoned Newsoara Patents	Section 7.2(c)
Abandoned vTv Patents	Section 7.2(a)
HKIAC	Section 12.2(b)(i)
Agents	Section 8.1
Alliance Manager	Section 3.2(f)
Arbitrators	Section 12.2(b)(i)
Claim	Section 12.2(b)(i)
Commercialization Plan	Section 4.2
Confidential Information	Section 8.2
Confidentiality Agreement	Section 8.2
Effective Date	Preamble
Indemnified Party	Section 10.3(a)
Indemnifying Party	Section 10.3(a)
Infringement Claim	Section 7.3(a)
Infringement of Third Party Rights Claim	Section 7.5
JDC	Section 3.2(a)
Joint Inventions	Section 7.1(b)
Joint Patent Rights	Section 7.2(b)
Late Payment Notice	Section 6.11
Newsoara	Preamble
Newsoara Parties	Section 10.2
Newsoara Sole Inventions	Section 7.1(a)
Other API	Section 1.8
Paragraph IV Claim	Section 7.9(a)
Product Liability	Section 10.1(b)
Product Marks	Section 7.8
Remedial Action	Section 5.2(c)
Royalty Term	Section 6.5(b)
Safety Agreement	Section 5.2(a)(i)
Sole Inventions	Section 7.1(a)
Standard Redaction	Section 12.7
Term	Section 11.1
Third Party Claims	Section 10.1
Third Party Patent Licenses	Section 6.5(d)
vTv	Preamble
vTv Manufacturing Know-How	Section 2.5(b)
vTv Parties	Section 10.1

Definition:	**Section:**
vTv Sole Inventions	Section 7.1(a)

1.70Captions; Certain Conventions; Construction. All headings and captions herein are for convenience only and shall not be interpreted as having any substantive meaning. The Schedules to this Agreement are incorporated herein by reference and shall be deemed a part of this Agreement. Unless otherwise expressly provided herein or the context of this Agreement otherwise requires:

(a) words of any gender include each other gender;

(b) words such as "herein", "hereof" and "hereunder" refer to this Agreement as a whole and not merely to the particular provision in which such words appear;

(c) words using the singular shall include the plural, and vice versa;

(d) the words "include," "includes" and "including" shall be deemed to be followed by the phrase "but not limited to", "without limitation", "inter alia" or words of similar import;

(e) the word "or" shall be deemed to include the word "and" (*i.e.*, shall mean "and/or")

(f) references to "Article," "Section," "subsection", "paragraph", "clause" or other subdivision, or to a Schedule, without reference to a document, are to the specified provision or Schedule of this Agreement; and

(g) references to "$" or "dollars" shall be references to US Dollars.

This Agreement shall be construed as if the Parties drafted it jointly.

ARTICLE II
GRANTS OF RIGHTS

2.1 Grants of Rights.

(a)License Grant by vTv. Except as otherwise provided in Section 2.2, vTv hereby grants to Newsoara an exclusive (even as to vTv and its Affiliates), royalty-bearing right and license, under the vTv Intellectual Property and vTv's interest in the Joint Intellectual Property, to (i) Develop Compounds and Products and (ii) Commercialize Products, in each case ((i) and (ii)) in the Field in the Territory; provided, that the grant of rights to Newsoara under this Section 2.1(a) shall not include any right to any Other API that is a proprietary compound of vTv or a Third Party (that is licensed to vTv) that is used in a Combination Product with a Compound.

(b)Sublicenses. Following the completion of a Phase II Clinical Trial, Newsoara shall have the right to grant sublicenses under the licenses to vTv Intellectual Property

and vTv's interest in the Joint Intellectual Property granted to Newsoara under Section 2.1(a) to its Affiliates and to Third Parties; provided, however, that any such sublicense shall be subject to all applicable terms and conditions of this Agreement and shall be notified to vTv in advance. Sublicenses to Third Parties that are granted only to (a) conduct Development activities on Newsoara's behalf (i.e., to Contract Research Organizations or Contract Manufacturing Organizations), (b) distribute and resell a Product, or (c) re-package a Product for resale are not (in any of (a), (b) or (c)) deemed to be sublicenses and do not require vTv's prior written consent, and otherwise sublicenses granted by Newsoara prior to the completion of a Phase II Clinical Trial shall require vTv's prior written consent.

(c)License Grant by Newsoara. Except as otherwise provided in this Section 2.1(c), Newsoara hereby grants to vTv a non-exclusive, non-royalty-bearing right and license, with the right to grant sublicenses, under all Newsoara Patent Rights, Newsoara Know-How and Newsoara's interest in the Joint Intellectual Property, to (i) Develop Compounds and Products and (ii) Commercialize Products, in each case ((i) and (ii)) in the Field outside of the Territory; provided, that the grant of rights to vTv under this Section 2.1(c) shall not include any right to any Other API that is a proprietary compound of Newsoara or a Third Party (that is licensed to Newsoara) that is used in a Combination Product with a Compound; and provided, further, that, with respect to any Newsoara Patent Rights or Newsoara Know-How that Newsoara acquires from a Third Party (by license or otherwise), the grant of rights to vTv under this Section 2.1(c) shall only be to the extent permitted and if elected by vTv, and shall be subject to any applicable terms and conditions, under Newsoara's agreement with such Third Party, and vTv shall pay Newsoara or such Third Party, as reasonably determined by Newsoara, vTv's share of any payments required to be made to such Third Party in respect of vTv's exercise of such rights in the Field outside the Territory. In connection with granting sublicenses of its rights under this Section 2.1(c) to Related Parties, vTv will request that such Related Parties agree to grant back to vTv a non-exclusive, non-royalty-bearing, sublicensable right and license, under applicable intellectual property Controlled by such Related Parties, to Develop and Commercialize the Compounds and Products in the Territory.

(d)Right of Reference. Each Party hereby grants to the other Party and its Related Parties a right of reference to all Regulatory Filings pertaining to the Product in the Field submitted by or on behalf of such Party and/or its Related Parties, as applicable. Newsoara and its Related Parties may use such right of reference to vTv's and its Related Parties' Regulatory Filings in the Field solely for the purpose of seeking, obtaining and maintaining Regulatory Approval of the Product in the Field in the Territory. vTv and its Related Parties may use such right of reference to Newsoara's and its Related Parties' Regulatory Filings in the Field solely for the purpose of seeking, obtaining and maintaining Regulatory Approval of any Product outside the Territory.

2.2 Rights Retained by the Parties. Any other rights of vTv or Newsoara, as the case may be, not expressly granted to the other Party under the provisions of this Agreement shall be retained by such Party.

2.3 Section 365(n) of the Bankruptcy Code. All rights and licenses granted under or pursuant to any section of this Agreement, including the licenses granted under Section 2.1 or 11.5(d) to Patent Rights and Know-How (including any data included in

the Know-How), are and will otherwise be deemed to be for purposes of Section 365(n) of the Bankruptcy Code, licenses of rights to "intellectual property" as defined in Section 101(35A) of the Bankruptcy Code. Each Party will retain and may fully exercise all of its respective rights and elections under the Bankruptcy Code. The Parties agree that each Party, as licensee of such rights under this Agreement, will retain and may fully exercise all of its rights and elections under the Bankruptcy Code or any other provisions of applicable Law outside the United States that provide similar protection for "intellectual property." The Parties further agree that, in the event of the commencement of a bankruptcy proceeding by or against the licensor Party under the Bankruptcy Code or analogous provisions of applicable Law outside the United States, the licensee Party will be entitled to a complete duplicate of (or complete access to, as the licensee Party deems appropriate) such intellectual property and all embodiments of such intellectual property, which, if not already in the licensee Party's possession, will be promptly delivered to it upon the licensee Party's written request thereof. Any agreements supplemental hereto will be deemed to be "agreements supplementary to" this Agreement for purposes of Section 365(n) of the Bankruptcy Code.

2.4 Exclusivity.

(a)Beginning on the Effective Date, neither Newsoara nor any of its Affiliates shall, alone or in collaboration with any other Person, Commercialize any Competing Product in the Territory, or grant a license to any other Person to Commercialize any Competing Product in the Territory.

(b)If Newsoara, either directly or through any Subsidiary, acquires a Competing Product that has received Regulatory Approval anywhere in the Territory, the sale or distribution of which would violate Section 2.4(a), through an acquisition, whether by merger, purchase of assets or equity, or otherwise, of the whole or substantially the whole of the business or assets of a Third Party, Newsoara shall, within [***] days after the date of Newsoara's board approval of such acquisition, notify vTv of such acquisition. Newsoara shall use Commercially Reasonable Efforts to (i) identify a Third Party purchaser to whom Newsoara will divest its interest in such Competing Product and (ii) enter into a definitive agreement with such Third Party for such divestiture within [***] months after the closing of Newsoara's acquisition thereof. So long as Newsoara uses Commercially Reasonable Efforts to divest the Competing Product in accordance with this Section 2.4(b), such acquisition shall not be deemed a violation of Section 2.4(a).

(c)If vTv, either directly or through any Subsidiary, acquires a Competing Product that has received Regulatory Approval anywhere in the Territory, through an acquisition, whether by merger, purchase of assets or equity, or otherwise, of the whole or substantially the whole of the business or assets of a Third Party, vTv shall, within [***] days after the date of vTv's board approval of such acquisition, notify Newsoara of such acquisition. vTv shall use Commercially Reasonable Efforts to (i) identify a Third Party purchaser to whom vTv will divest its interest in such Competing Product and (ii) enter into a definitive agreement with such Third Party for such divestiture within [***] months after the closing of vTv's acquisition thereof.

2.5 Transfer of vTv Know-How.

(a)During the [***] month period immediately following the Effective Date, vTv shall provide Newsoara reasonable assistance in transitioning vTv Know-How (other than vTv Manufacturing Know-How) to Newsoara at no additional cost other than reimbursement of vTv's reasonable related out-of-pocket expenses. vTv shall reasonably cooperate with Newsoara's requests in connection with such transfer so as not to delay the timelines set forth in the Development Plan. Such assistance shall include providing Newsoara with reasonable amounts of consultation regarding the transferred vTv Know-How.

(b)If Newsoara elects to Manufacture the Compounds and/or the Products for itself in the Field in the Territory for Development and Commercialization purposes, which Newsoara may elect to do after Newsoara's payment to vTv of the initial license payment set forth in Section 6.1, then at Newsoara's request vTv will, during the [***] month period immediately following vTv's receipt of payment set forth in Section 6.1, transfer to Newsoara or Newsoara's Related Party, the vTv Know-How reasonably necessary or useful to enable Manufacture of the applicable Compounds and/or Products for Development and Commercialization in the Territory in the Field and not previously transferred to Newsoara or Newsoara's Related Party ("vTv Manufacturing Know-How"). Such Know-How transfer by vTv shall be conducted using Commercially Reasonable Efforts and shall include, as available, copies or samples of relevant documentation, materials, analytical assays for the Compounds and/or the Products and other embodiments of such vTv Know-How. During any such vTv Manufacturing Know-How transfer, vTv shall also make available its qualified technical personnel on a reasonable basis to consult with Newsoara, such Affiliate of Newsoara or such Third Party manufacturer with respect to such vTv Manufacturing Know-How. Newsoara shall bear the travel and lodging expenses of the vTv personnel, including international travel between U.S. and mainland China, and local transportation and lodging in mainland China, provided that (a) Newsoara requests those vTv personnel to assist the technical transfer at the facility in mainland China and (b) travel by air should be in business class. The costs of such travel and lodging shall be agreed by the Parties in advance and, to the extent requested by vTv, prepaid by Newsoara.

2.6 Regulatory Filings. For the purpose of this Agreement, Newsoara shall be responsible for, and be the owner of all Regulatory Filings in any Region of the Territory in connection with the Compound or Products. Newsoara will and will require its Related Parties to keep vTv informed of regulatory developments related to the Products in the Territory and will promptly notify vTv in writing of any decision by a Regulatory Authority in the Territory regarding any Product. Newsoara will and will require its Related Parties to notify vTv of any Regulatory Filings submitted to or received from any Regulatory Authority in the Territory and will provide vTv copies thereof (along with a brief summary in English if the original language is not English) within five (5) days after submission or receipt. vTv will notify Newsoara of any Regulatory Filings of vTv or its Related Parties submitted to or received from any Regulatory Authority outside the Territory and will provide Newsoara copies thereof (along with a brief summary in English if the original language is not English) within five (5) days after submission or receipt.

2.7 Generic Products. Neither Newsoara nor its Affiliates or any Third Party authorized by Newsoara or any of its Affiliates shall introduce the first Product sold in

generic form for a given Product in any country, but shall be free to commence commercial sales of Products sold in generic form in any country upon the first sale of a Generic Product for such Product by a Third Party not authorized by Newsoara or any of its Affiliates in such country.

ARTICLE III
DEVELOPMENT

3.1 General. From and after the Effective Date, and subject to the terms of this Agreement, including the requirements of ARTICLE V, Newsoara shall be solely responsible for the Development of Compounds and Products in the Field in the Territory, including all costs and expenses relating thereto, and shall use Commercially Reasonable Efforts to perform such Development in accordance with the Development Plan. The Development Plan may be amended from time to time by the JDC.

3.2 Joint Development Committee. The Parties hereby establish a Joint Development Committee (the "JDC") to oversee the Development of Products in the Field in accordance with the Development Plan.

(a)Membership; Decision Making. The JDC shall be comprised of three (3) named representatives of Newsoara and three (3) named representatives of vTv. Each Party shall notify the other within [***] days after the Effective Date of the appointment of its representatives to the JDC. Each Party may change its representatives to the JDC from time to time in its sole discretion, effective upon notice to the other Party of such change. These representatives shall have appropriate technical credentials, experience and knowledge, and ongoing familiarity with Development Plan activities as well as sufficient authority to take actions on behalf of a Party to the extent permitted under this Agreement. Each Party shall have collectively one (1) vote in all decisions and the Parties shall attempt to make decisions by consensus. In the event the JDC cannot reach consensus on any matter within the scope of its oversight, disputes shall be referred to the Parties' respective Senior Executives. If the Senior Executives cannot resolve the dispute within [***] days after the dispute has been referred to them, then Newsoara shall have the final decision-making authority with respect to such dispute; provided that Newsoara shall not exercise its final decision-making authority in any manner that (i) expands vTv's obligations or reduces vTv's rights under this Agreement or (ii) expands Newsoara's rights or reduces Newsoara's obligations under this Agreement. Each Party shall bear its own expenses related to the attendance of such meetings by its representatives.

(b)Meetings. The JDC shall meet in accordance with a schedule established by mutual written agreement of the Parties, but no less frequently than [***] time each Calendar Quarter during the Development by Newsoara of Compounds or Products, with the location for such meetings alternating between vTv and Newsoara facilities (or such other location as may be agreed by the Parties). Alternatively, the JDC may meet by means of teleconference, videoconference or other similar communications equipment. Subject to Section 3.2(e), meetings of the JDC shall be effective only if at least one (1) representative of each Party is participating.

(c)Scope of Joint Development Committee Oversight. The JDC's oversight responsibilities shall be limited to the Development of Compounds and Products in the Field in the Territory. Within such scope the JDC may: (i) confer regarding the status of Development Plan activities; (ii) review and approve amendments to the Development Plan; (iii) address such other matters relating to the Development of Compounds and Products in the Field as either Party may bring before the JDC; and (iv) attempt to resolve any dispute within the JDC on an informal basis. The JDC shall have no authority to (x) subject to Section 6.3(a), determine whether any milestone event set forth in Section 6.3 or 6.4 has been met, (y) make any decision expressly allocated herein to either or both Parties, or (z) amend any provision of this Agreement, other than the Development Plan pursuant to Section 3.1.

(d)Protocol Review and Approval. The JDC shall also review and approve any protocols at least [***] Business Days prior to the earlier of submission to a Regulatory Authority or the initiation of any clinical study. Such review and approval will occur, as necessary, outside the context of the JDC meetings set forth in Section 3.2(b).

(e)vTv Right Not to Participate.

(i)Appointment is a Right. The appointment of members of the JDC is a right of vTv and not an obligation of vTv and shall not be a "performance obligation" as referenced in any existing authoritative accounting literature. vTv shall be free to determine not to appoint members to the JDC.

(ii) Consequence of Non-Appointment. If vTv does not appoint members of the JDC, it shall not be a breach of this Agreement, nor shall any consideration be required to be returned, and, unless and until such members are appointed by vTv, Newsoara may unilaterally discharge the roles of the JDC. If vTv does not appoint members of the JDC, Newsoara shall provide directly to vTv the information, data, materials, summaries and other items that Newsoara is obligated to provide to the JDC pursuant to Section 3.3 below.

(f)Alliance Manager. Each Party shall appoint a person(s) who shall oversee contact between the Parties for all matters related to Development of Compounds and/or Products between meetings of the JDC and shall have such other responsibilities as the Parties may agree in writing after the Effective Date (each, an "Alliance Manager"). Each Party may replace its Alliance Manager at any time by notice in writing to the other Party.

3.3 Exchange of Information Regarding Development. Newsoara shall and shall require its Related Parties to regularly provide vTv, directly or through the JDC (subject to Section 3.2(e)(ii)), with all material information and data relating to the Development of Compounds and Products in the Field (i.e. preclinical and clinical study reports, pharmacology reports, toxicology reports, CMC reports, formulation reports, and raw data) in the Territory. In addition, Newsoara shall and shall require its Related Parties to promptly upon request by vTv, provide vTv with all reasonable additional information Controlled by Newsoara or its Related Parties relating to Development of Compounds and Products in the Field. Without limiting the generality of the foregoing, at least once each Calendar Quarter during the Term, Newsoara shall and shall require its Related Parties to provide vTv, directly or through the JDC, with a reasonably detailed

report describing Development activities and the summary results thereof with respect to all Compounds and Products in the Territory. vTv will keep Newsoara reasonably informed, directly or through the JDC, of vTv's Development activities and the summary results thereof with respect to all Compounds and Products outside the Territory; provided, that vTv shall condition [***] on [***]. In satisfying the obligations under this Section 3.3, each Party shall comply with all applicable data privacy Laws.

3.4 Collaboration Provisions. vTv shall notify Newsoara in writing whether [***] promptly after execution of the applicable agreement. If [***] as set forth in the applicable portions of Section 3.3, then [***] set forth in Section 3.3. Notwithstanding the foregoing, the Parties shall ensure that each Party is reasonably informed, directly or through the JDC, of all material safety information and data relating to the Development of Compounds and Products in the Field.

ARTICLE IV
COMMERCIALIZATION

4.1 General. From and after the Effective Date, and subject to the terms of this Agreement, including the requirements of ARTICLE V, Newsoara shall be solely responsible for the Commercialization of Products in the Field in the Territory, including all costs and expenses relating thereto.

4.2 Commercialization Plans. During the Royalty Term with respect to each Product, at least [***] days prior to the commencement of each Newsoara Fiscal Year, Newsoara shall provide a summary of the planned Commercialization activities to be conducted by or on behalf of Newsoara and its Affiliates and Sublicensees with respect to such Product in each Region in the Territory during such Calendar Year in the form set forth in Schedule 4.2 (each such plan, a "Commercialization Plan").

4.3 Commercialization Reports. Within [***] Business Days after the date Newsoara files the first NDA for a Product and at least every [***] months during the Royalty Term with respect to each Product, Newsoara shall provide a report to vTv summarizing Newsoara's sales, marketing and promotional activities for such Product during the prior applicable period, including copies of the material visual aids and other material detail materials used in the promotion of such Product in any Region in the Territory, key opinion leader activities and projected pricing information, and a summary of the progress during the applicable period against the planned Commercialization activities set forth in the applicable Commercialization Plan. Newsoara shall reasonably respond to any vTv question about the contents of each such report.

ARTICLE V
DILIGENCE

5.1 Commercially Reasonable Efforts. During the Term, Newsoara shall, directly or through its Affiliates or Sublicensees, use Commercially Reasonable Efforts to (a) [***] and (b) [***].

5.2 Regulatory Obligations.

(a)Adverse Events Reporting.

(i)Following the Effective Date, but in no event less than ninety (90) days prior to the initiation of a Phase II Clinical Trial by either Newsoara or vTv, Newsoara and vTv will develop and agree to worldwide safety and pharmacovigilance procedures for the Parties with respect to the Products, such as safety data sharing and exchange, Adverse Events reporting and prescription events monitoring in a written agreement (the "Safety Agreement"). Such agreement will describe the coordination of collection, investigation, reporting, and exchange of information concerning Adverse Events or any other safety problem of any significance, and product quality and product complaints involving Adverse Events, sufficient to permit each Party, its Affiliates, licensees or sublicensees to comply with its legal obligations. The Safety Agreement will be promptly updated if required by changes in legal requirements. Each Party hereby agrees to comply with its respective obligations under the Safety Agreement and to cause its Affiliates, licensees and sublicensees to comply with such obligations. To the extent there is any disagreement between this Section 5.2 or any related definitions and the Safety Agreement, the Safety Agreement shall control with respect to safety matters and this Agreement shall control with respect to all other matters.

(ii)Each Party (and their respective sublicensees, to the extent applicable) will maintain an Adverse Event database for the Products in the Territory (in the case of Newsoara) or outside the Territory (in the case of vTv), at such party's sole cost and expense, and will be responsible for reporting quality complaints, Adverse Events and safety data related to the Products to the applicable Regulatory Authorities in the Territory (in the case of Newsoara) or outside the Territory (in the case of vTv), as well as responding to safety issues and to all requests of Regulatory Authorities related to the Products in the Territory (in the case of Newsoara) or outside the Territory (in the case of vTv). Each Party will provide the other with access to, and the information contained in, such Party's Adverse Event database.

(iii)Each Party will be responsible for complying with all applicable Laws governing Adverse Events in the Territory (in the case of Newsoara) and outside the Territory (in the case of vTv) that occur after the Effective Date. Each Party will notify the other Party on a timely basis of any Adverse Events occurring at or reported by any clinical trial location at which such Party is responsible for performing clinical trials. The reporting Party will submit copies of reports of Adverse Events to the non-reporting Party simultaneously with submission to the applicable Regulatory Authorities. Each Party will notify the other in a timely manner and in any event within twenty-four (24) hours of receiving any serious Adverse Event reports from clinical trials that each Party is monitoring, notice from a Regulatory Authority, independent review committee, data safety monitoring board or another similar clinical trial or post-marketing monitoring body alleging significant concern regarding a patient safety issue or other material information relevant to the safety or efficacy of any Product.

(b)Notification of Threatened Action. Each Party will immediately notify the other Party of any information it receives regarding any threatened or pending action, inspection or communication by any Regulatory Authority, which may affect the safety or efficacy claims of any Product or the continued marketing of any Product. Upon receipt of

such information, the Parties will consult with each other in an effort to arrive at a mutually acceptable procedure for taking appropriate action.

(c)Remedial Actions. Each Party will notify the other immediately, and promptly confirm such notice in writing, if it obtains information indicating that any Product may be subject to any recall, corrective action or other regulatory action by any Governmental Authority or Regulatory Authority (a "Remedial Action"). The Parties will assist each other in gathering and evaluating such information as is necessary to determine the necessity of conducting a Remedial Action. Newsoara will have sole discretion with respect to any matters relating to any Remedial Action in the Territory, including the decision to commence such Remedial Action and the control over such Remedial Action. The cost and expenses of any Remedial Action in the Territory will be borne solely by Newsoara. Newsoara will, and will ensure that its Affiliates and Sublicensees will, maintain adequate records to permit the Parties to trace the manufacture, distribution and use of the Product in the Territory.

ARTICLE VI
FINANCIAL PROVISIONS

6.1 Initial License Payment. Newsoara shall make a non-refundable, non-creditable payment to vTv of Two Million dollars ($2,000,000) before [***].

6.2 Development and Commercialization Costs. For clarity, following the Effective Date, Newsoara shall be solely responsible for all costs it incurs in Developing and Commercializing Compounds and Products, including all Manufacturing costs.

6.3 Event Milestone Payments.

(a)Newsoara shall pay to vTv the non-refundable, non-creditable, one-time payments set forth below after the earliest date on which the corresponding milestone event set forth below is achieved by Newsoara or any of its Affiliates or Sublicensees with respect to a Compound or Product, as the case may be:

Milestone Event	Payment
[***]	
[***]	$[***]
[***]	$[***]
[***]	$[***]
[***]	$[***]
[***]	
[***]	$[***]

[***]	$[***]

(b)Each milestone payment set forth in Section 6.3(a) shall be reported by Newsoara to vTv and paid within the time period specified in Section 6.10 for such payment. Each milestone payment set forth in Section 6.3(a) shall be paid at most once, even if more than one Compound or Product shall achieve the same milestone event.

(c)If a later Development milestone event is achieved prior to the achievement of an earlier Development milestone event, then all milestone payments due and payable for the earlier Development milestone event, if not previously paid, shall become due and payable simultaneously with the payment for achievement of the subsequent Development milestone event.

6.4 Milestone Payments. In addition to all other amounts payable under this Agreement, Newsoara shall pay to vTv non-refundable, non-creditable, one-time milestone payments based on Net Sales of Products in all Regions of the Territory, in the amounts provided below:

Milestone Event	Payment
(i)[***]	$[***]
(ii)[***]	$[***]
(iii)[***]	$[***]

Each milestone payment set forth in this Section 6.4 shall be paid within the time period specified in Section 6.6 for such payment and shall be paid at most once. If two (2) or more of the milestone events set forth in this Section 6.4 are achieved in the same Calendar Year, such that two (2) or more of such milestone payments become payable in such Calendar Year, then Newsoara shall pay each of such applicable milestone payments within the time period specified in Section 6.6 for each such payments, [***].

6.5 Product Royalties.

(a)Royalty Rate. Subject to Section 6.5(b)-(e), Newsoara shall pay to vTv royalties, on a Product-by-Product basis, on Net Sales of Products in the Territory during each Calendar Year during the applicable Royalty Term as follows:

(i)[***]% of Calendar Year Net Sales of such Product less than or equal to $[***];

(ii)[***]% of Calendar Year Net Sales of such Product greater than $[***] and less than or equal to $[***];

(iii)[***]% of Calendar Year Net Sales of such Product greater than $[***].

By way of example, if annual Net Sales of Product by Newsoara and its Affiliates and Sublicensees in a Calendar Year are $[***], Newsoara will pay vTv a royalty of $[***], comprising $[***] on that portion of Net Sales that is less than $[***], $[***] on that portion of Net Sales that is greater than $[***] and less than or equal to $[***], and $[***] on that portion of Net Sales that is in excess of $[***].

(b)Royalty Term and Adjustments. Newsoara's royalty obligations to vTv under this Section 6.5 shall commence on a Region-by-Region and Product-by-Product basis on the Effective Date and shall expire on a Region-by-Region basis and Product-by-Product basis on the later of (i) expiration of all Legal Exclusivity as to such Product in such Region or (ii) the tenth (10th) anniversary of the date of the First Commercial Sale by Newsoara or any of its Affiliates or Sublicensees to a non-Sublicensee Third Party of such Product (in any formulation or dosage form for any indication) in such Region (the "Royalty Term"); provided that, during any period within the Royalty Term, if any, remaining after the expiration of all Legal Exclusivity as to such Product in such Region, the royalties payable as to such Product in such Region under this Section 6.5 shall be reduced to [***] of the royalties otherwise payable as to such Product in such Region pursuant to Section 6.5(a).

(c)Royalty Adjustment for Generic Competition. If there is Generic Competition with respect to a particular Product in a particular Region, then, for so long as such Generic Competition exists with respect to such Product in such Region, the royalties payable as to such Product in such Region under this Section 6.5 shall be reduced to [***] of the royalties otherwise payable as to such Product in such Region pursuant to Section 6.5(a).

(d)Third Party Payments. If Newsoara reasonably determines that it cannot Commercialize a Product in the Field in a Region of the Territory without infringing a Patent Rights, trade secret or other intellectual property right not licensed hereunder unless it obtains a license to such patent from a Third Party and pays a royalty or other payment under such license ("Third Party Patent Licenses") with respect to any Product in a Region, [***] of any consideration paid under Third Party Patent Licenses by Newsoara or its Related Parties shall be creditable against royalties payable to vTv hereunder with respect to such Product in the applicable Region ; provided, however, that in no event shall such credit cause the royalties paid to vTv on Net Sale of such Product in such Region for any Calendar Quarter to be reduced to less than [***] of the amount that would otherwise be payable to vTv for such Product in such Region for such Calendar Quarter pursuant to Section 6.5(a).

(e)Aggregate Royalty Reductions. Notwithstanding anything to the contrary in this Section 6.5, in no event shall the royalties otherwise payable under this Section 6.5 with respect to Net Sales of any Product in any Region in any Calendar Quarter be reduced to less than [***] of the royalties payable under Section 6.5(a) with respect to Net Sales of such Product in such Region in such Calendar Quarter.

6.6 Reports; Payments. Within [***] days after the end of each [***] during which there are Net Sales giving rise to a payment obligation under Section 6.4 or 6.5,

Newsoara shall submit to vTv a report identifying, for each Product, the Net Sales for such Product for each Region in the Territory for such [***], any sales milestone and royalty payable to vTv and the basis for any reduction in royalties pursuant to any subsection of Section 6.5. Concurrently with each such report, Newsoara shall pay to vTv all sales milestones and royalties payable by it under Sections 6.4 and 6.5. In addition, within [***] days after the end of each [***], Newsoara shall deliver to vTv a report in a form mutually agreeable to both Parties detailing the components of Net Sales on a Product-by-Product and Region-by-Region basis.

6.7 Books and Records; Audit Rights. Newsoara 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 6.4 and 6.5 in accordance with International Financial Reporting Standards (IFRS). vTv shall have the right, once annually at its own expense, to have an independent, certified public accounting firm, selected by vTv and reasonably acceptable to Newsoara, review any such records of Newsoara in the location(s) where such records are maintained by Newsoara upon reasonable notice (which shall be no less than [***] days prior 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 6.4 and 6.5 within the [***] 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 Newsoara during such period is accurate or inaccurate and the actual amounts of Net Sales, and sales milestones and royalties due, for such period. Newsoara shall receive a copy of each such report concurrently with receipt by vTv. Should such inspection lead to the discovery of a discrepancy to vTv's detriment, Newsoara shall (i) pay to vTv within five (5) Business Days after its receipt from the accounting firm of the certificate the amount of the underpayment plus (ii) pay to vTv interest calculated in accordance with Section 6.11, provided that, for the purposes of this clause (ii), the underpayment exceeds [***] of the total payment owed. vTv shall pay the full cost of the review unless the underpayment of sales milestones or royalties is greater than [***] of the amount due for any applicable Calendar Year, in which case Newsoara shall pay the reasonable cost charged by such accounting firm for such review. Any overpayment by Newsoara revealed by an examination shall be fully creditable against future Payments.

6.8 Tax Matters. No Payments shall be reduced on account of any taxes unless required by Law, provided, that Newsoara shall be entitled to deduct and withhold from any Payments otherwise payable to vTv pursuant to this Agreement such amounts as it is required to deduct and withhold with respect to the making of such payment under any other applicable national, local or foreign tax Law. vTv alone shall be responsible for paying any and all taxes (other than withholding taxes and value added taxes required by Law to be deducted and paid on vTv's behalf by Newsoara) levied on account of, or measured in whole or in part by reference to, any Payments vTv receives. The Parties will cooperate in good faith to obtain the benefit of any relevant rules, regulations, applicable Laws, and tax treaties to minimize as far as reasonably possible any taxes that may be levied on any Payments. Newsoara shall deduct or withhold from the Payments any taxes that it is required by Law to deduct or withhold. Notwithstanding the

foregoing, if vTv is entitled under any applicable rule, regulation, applicable Law, or tax treaty to a reduction of the rate of, or the elimination of, applicable withholding tax or value added tax, it may deliver to Newsoara or the appropriate Governmental Authority (with the assistance of Newsoara to the extent that this is reasonably required and is expressly requested in writing) the prescribed forms necessary to reduce the applicable rate of withholding or value added tax or to relieve Newsoara of its obligation to withhold tax, and Newsoara shall apply the reduced rate of withholding tax or value added tax, or dispense with withholding tax or value added tax, as the case may be. If, in accordance with the foregoing, Newsoara withholds any amount, it shall make timely payment to the proper taxing authority of the withheld amount, and send to vTv proof of such payment within [***] days following that latter payment.

6.9 Payment Method and Currency Conversion. All Payments shall be made in US dollars in immediately available funds via either a bank wire transfer, an ACH (automated clearing house) mechanism, or any other means of electronic funds transfer, at Newsoara's election, to a bank account specified by vTv in a notice at least [***] days before the payment is due. For the purposes of determining the achievement of any sales milestone payment under Section 6.4 or the amount of any royalties due for the relevant Calendar Quarter under Section 6.5, the amount of Net Sales in any foreign currency shall be converted into US dollars in accordance with the prevailing rates of exchange for the relevant month for converting such first currency into such other currency used by Newsoara's internal accounting systems, which are independently audited on an annual basis. Upon request by vTv, Newsoara shall disclose the bases for the rates of exchange used for purposes of assuring that such rates reflect prevailing rates of exchange.

6.10 Payment Procedure and Blocked Payments. Following the occurrence of each payment event set forth in this Agreement, Newsoara shall notify vTv of such occurrence within [***] days thereafter and vTv shall invoice Newsoara for the corresponding amount due (excluding the initial license payment set forth in Section 6.1, for which an invoice is attached as Schedule 6.10 and which shall be paid by Newsoara on or before [***]). The payment will be paid within [***] days following Newsoara's receipt of the invoice. Newsoara or its Affiliates shall take all actions required by applicable Laws for the purpose of transferring, or having transferred on its behalf, milestones, royalties or any other payments to vTv pursuant to this Agreement, including but not limited to filing or registration of this Agreement with the competent Government Authority and obtaining any required approval, permit or license for the payment transfer from the competent Government Authority. If by reason of applicable Laws in any Region in the Territory, it becomes impossible or illegal for Newsoara or its Affiliates or Sublicensees to transfer, or have transferred on its behalf, milestones, royalties or other payments to vTv or to Newsoara or its Affiliates or Sublicensees, Newsoara shall promptly notify vTv of the conditions preventing such transfer. To the extent any payments to vTv cannot be transferred pursuant to the preceding sentence, such amounts shall be deposited in local currency in the relevant Region to the credit of vTv in a recognized banking institution designated by vTv or, if none is designated by vTv within a period of [***] days upon Newsoara's notification to vTv of the conditions preventing the transfer, in a recognized banking institution selected by Newsoara or its Affiliate or

Sublicensee, as the case may be, and identified in a notice given to vTv; satisfactory transfer pursuant to this sentence shall be deemed a timely payment. If so deposited in a foreign country or region, Newsoara shall provide, or cause its Affiliate or Sublicensee to provide, reasonable cooperation to vTv so as to allow vTv to assume control over such deposit as promptly as practicable.

6.11 Late Payments. If a Party shall fail to make a timely payment pursuant to the terms of this Agreement, the other Party shall provide written notice of such failure to the non-paying Party (a "Late Payment Notice"), and interest shall accrue on the past due amount starting on the date of the Late Payment Notice at the thirty (30) day US dollar London Interbank Offered Rate effective for the date that payment was due (as published in the Wall Street Journal) plus five percent (5%) per annum, computed for the actual number of days after the date of the Late Payment Notice that the payment was past due.

ARTICLE VII
INTELLECTUAL PROPERTY OWNERSHIP, PROTECTION AND RELATED MATTERS

7.1 Ownership of Inventions.

(a)Sole Inventions. Each Party shall exclusively own all inventions made solely by such Party and its Subsidiaries, and its and their employees, agents and consultants ("Sole Inventions"). Sole Inventions made solely by Newsoara and its Subsidiaries, and its and their employees, agents and consultants are referred to herein as "Newsoara Sole Inventions". Sole Inventions made solely by vTv and its Subsidiaries, and its and their employees, agents and consultants are referred to herein as "vTv Sole Inventions".

(b)Joint Inventions. The Parties shall jointly own all inventions made jointly by employees, agents and consultants of Newsoara and its Subsidiaries, on the one hand, and employees, agents and consultants of vTv and its Subsidiaries, on the other hand, on the basis of each Party having an undivided interest in the whole ("Joint Inventions"). Subject to the licenses and other provisions of this Agreement, each Party shall have the unrestricted right to use and license Joint Inventions without obtaining consent from, or accounting to, the other Party.

(c)Inventorship. For purposes of determining whether an invention is a Newsoara Sole Invention, a vTv Sole Invention, or a Joint Invention questions of inventorship shall be resolved in accordance with United States patent Laws.

7.2 Prosecution and Maintenance of Patent Rights.

(a)Prosecution of vTv Patent Rights. With respect to vTv Patent Rights in the Territory, vTv and Newsoara shall cooperate in connection with the continued prosecution and maintenance by vTv of such vTv Patent Rights in the Territory. The out-of-pocket costs and expenses solely incurred to obtain, prosecute and maintain vTv Patent Rights in the Territory shall be borne [***] by [***]. The expenses incurred to draft an application included in vTv Patent Rights, to file and prosecute the Patent Cooperation Treaty (PCT) application included in vTv Patent Rights before the national phase deadline, and to obtain, prosecute and maintain vTv

Patent Rights outside the Territory shall be borne [***] by [***]. If vTv files a new patent application anywhere in the world for which a vTv Patent Right in the Territory could be filed, vTv shall notify Newsoara and provide Newsoara with a copy of such filings within [***] Business Days of such filing. vTv shall notify Newsoara at least [***] days prior to the deadline for entering into national phase with respect to any Patent Cooperation Treaty (PCT) application included in vTv Patent Rights. No later than [***] days prior to entry into national phase, Newsoara shall provide vTv with a list of Regions within the Territory in which Newsoara would like vTv to file. vTv shall file international patent applications, or designate for national filing and file, in the Territory when requested by Newsoara. Newsoara shall have access to all documentation, filings and communications to or from the respective patent offices in the Territory, at reasonable times and upon reasonable notice. vTv shall keep Newsoara informed of the status of all pending patent applications in the Territory that pertain to any Compound or any Product. vTv, its agents and attorneys shall implement or incorporate, absent a substantial reason to the contrary, all comments of Newsoara regarding any aspect of such patent prosecutions in the Territory. vTv shall not abandon any vTv Patent Rights (the "Abandoned vTv Patents") in the Territory without at least [***] days' prior notice to Newsoara. If vTv decides to abandon any vTv Patent Rights in the Territory, Newsoara shall, at its sole expense, have the option to continue to prosecute and maintain the Abandoned vTv Patents in vTv's name by providing written notice to vTv. In such event, vTv shall promptly provide Newsoara with the appropriate documents to continue to prosecute or maintain the Abandoned vTv Patents. For avoidance of doubt, following such transfer of prosecution and maintenance rights, such Abandoned vTv Patents will continue to be vTv Patent Rights.

(b)Prosecution of Joint Patent Rights. Newsoara shall be responsible for obtaining, prosecuting, and/or maintaining Patent Rights covering Joint Inventions ("Joint Patent Rights") on a worldwide basis, including countries or regions reasonably requested by vTv, in the name of both Parties; provided, however, that Newsoara shall notify vTv in writing within [***] Business Days after filing any patent application that falls within the definition of Joint Patent Rights. The out-of-pocket costs and expenses incurred to draft an application included in Joint Patent Rights, to file and prosecute the Patent Cooperation Treaty (PCT) application included in Joint Patent Rights before the national phase deadline, and obtain, prosecute and maintain Joint Patent Rights inside the Territory shall be borne [***] by [***]. The out-of-pocket costs and expenses solely incurred to obtain, prosecute and maintain Joint Patent Rights outside the Territory shall be borne [***] by [***]. Newsoara shall notify vTv at least [***] days prior to the earliest deadline for entering into national phase with respect to any Patent Cooperation Treaty (PCT) application included in the Joint Patent Rights. No later than [***] days prior to the earliest deadline to enter into national phase, vTv shall provide Newsoara with a list of any country or region outside the Territory in which vTv would like Newsoara to file. Newsoara shall keep vTv informed of the status of all pending Joint Patent Rights. Newsoara, its agents and attorneys shall implement or incorporate, absent a substantial reason to the contrary, all comments of vTv regarding any aspect of such patent prosecutions. Newsoara shall not abandon any Joint Patent Rights (the "Abandoned Joint Patents") in any country or territory without at least [***] days' prior notice to vTv. If Newsoara decides to abandon any Joint Patent Rights or refuses to pay due expense for the Joint Patent Rights, vTv shall have the option, at its sole expense, to continue to prosecute and maintain the Abandoned Joint Patents by providing written notice to Newsoara. Upon vTv's exercise of such option, Newsoara shall

promptly provide vTv with the appropriate documents to allow vTv to continue to prosecute or maintain such Abandoned Joint Patents.

(c)Prosecution of Newsoara Patent Rights. Newsoara has the sole right, but not the responsibility, to obtain, prosecute and/or maintain the Newsoara Patent Rights; provided, however, that Newsoara shall notify vTv in writing within [***] Business Days after filing any patent application that falls within the definition of Newsoara Patent Rights. The out-of-pocket costs and expenses solely incurred to obtain, prosecute and maintain Newsoara Patent Rights outside the Territory shall be borne [***] by [***]. The expenses incurred to draft an application included in Newsoara Patent Rights, to file and prosecute the Patent Cooperation Treaty (PCT) application included in Newsoara Patent Rights before the national phase deadline, and to obtain, prosecute and maintain Newsoara Patent Rights in the Territory shall be borne [***] by [***]. To the extent permitted by applicable Laws and contractual obligations owed by Newsoara to any Third Party, vTv shall have access to all documentation, filings and communications to or from the respective patent offices that pertain to any Compound or any Product, at reasonable times and upon reasonable notice. Newsoara shall keep vTv informed of the status of all pending patent applications that pertain to any Compound or any Product. Newsoara, its agents and attorneys shall implement or incorporate, absent a substantial reason to the contrary, all comments of vTv regarding any aspect of such patent prosecutions. Newsoara shall not abandon any Newsoara Patent Rights (the "Abandoned Newsoara Patents") in any territory without at least [***] days' prior notice to vTv. If Newsoara decides to abandon Newsoara Patent Rights outside the Territory, vTv shall have the option, at its sole expense, to continue to prosecute and maintain the Abandoned Newsoara Patents by providing written notice to Newsoara. Upon vTv's exercise of such option, Newsoara shall promptly provide vTv with the appropriate documents to allow vTv to continue to prosecute or maintain such Abandoned Newsoara Patents in Newsoara's name. For avoidance of doubt, following such transfer of prosecution and maintenance rights, such Abandoned Newsoara Patents shall continue to be Newsoara Patent Rights.

7.3 Third Party Infringement.

(a)Notice. Each Party shall promptly report in writing to the other Party during the Term any known or suspected (i) infringement of any of the vTv Patent Rights or Joint Patent Rights, or (ii) unauthorized use or misappropriation of any of the vTv Know-How or Joint Inventions, in the case of either clause (i) or clause (ii), that could reasonably be expected to impact the (A) Development, Manufacture, use or Commercialization of a Compound or Product in the Field in the Territory by Newsoara, or (B) scope of the rights licensed to Newsoara under ARTICLE II (an "Infringement Claim"), of which such Party becomes aware, and shall provide the other Party with all available evidence supporting such Infringement Claim.

(b)Initial Right to Enforce. Subject to Section 7.3(c), Newsoara shall have the first right, but not the obligation, to initiate a 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 vTv Intellectual Property and Joint Intellectual Property relating to a Compound or Product in the Field in the Territory, with respect to an Infringement Claim. Any such suit by Newsoara shall be brought either in the name of vTv or its Affiliate, the name of Newsoara or its Affiliate, or jointly by Newsoara, vTv and their

respective Affiliates, as may be required by the Law of the forum. For this purpose, vTv shall execute such legal papers and cooperate in the prosecution of such suit as may be reasonably requested by Newsoara; provided that Newsoara shall promptly reimburse all out-of-pocket expenses (including reasonable counsel fees and expenses) actually incurred by vTv in connection with such cooperation. For clarity, as between vTv and Newsoara, (i) vTv shall have the sole right, but not the obligation, to protect vTv Intellectual Property against any suspected misappropriation or infringement that does not constitute an Infringement Claim and (ii) the Parties shall jointly determine by mutual agreement whether and how to protect Joint Intellectual Property against any suspected misappropriation or infringement that does not constitute an Infringement Claim, and the provisions of this ARTICLE VII shall not apply with respect thereto.

(c)Step-In Right. If Newsoara does not initiate a suit or take other appropriate action that it has the initial right to initiate or take with respect to an Infringement Claim pursuant to Section 7.3(b), then vTv may, in its discretion, provide Newsoara with notice of vTv's intent to initiate a suit or take other appropriate action. If vTv provides such notice and Newsoara does not initiate a suit or take such other appropriate action within thirty (30) days after receipt of such notice from vTv, then vTv shall have the right to initiate a suit or take other appropriate action that it believes is reasonably required to protect the vTv Intellectual Property. Any suit by vTv shall be either in the name of vTv or its Affiliate, the name of Newsoara or its Affiliate, or jointly by Newsoara, vTv and their respective Affiliates, as may be required by the Law of the forum. For this purpose, Newsoara shall execute such legal papers and cooperate in the prosecution of such suit as may be reasonably requested by vTv; provided that vTv shall promptly reimburse all out-of-pocket expenses (including reasonable counsel fees and expenses) actually incurred by Newsoara in connection with such cooperation.

(d)Conduct of Certain Actions; Costs. The Party initiating suit with respect to an Infringement Claim shall have the sole and exclusive right to select counsel for, and otherwise control, any suit initiated by it pursuant to Section 7.3(b) or 7.3(c). 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 Sections 7.3(b) and 7.3(c), including the fees and expenses of the counsel selected by it. The other Party shall have the right to participate, but not control, and be represented in, any such suit by its own counsel at its own expense.

(e)Recoveries. Any damages, settlements, accounts of profits, or other financial compensation recovered from a Third Party by the Party that assumes control over enforcing any Infringement Claim shall be allocated between the Parties as follows:

(i)first, the Party that assumes control over enforcing such Infringement Claim shall retain an amount equal to [***]; and

(ii)second, any remaining amount shall be [***] by the enforcing Party and [***] to the other Party.

7.4 Patent Invalidity Claim. Each of the Parties shall promptly notify the other in the event of any legal or administrative action by any Third Party against a vTv Patent Right, a Joint Patent Right, or a Newsoara Patent Right of which it becomes

aware, including any nullity, revocation, reexamination or compulsory license proceeding. Newsoara shall have the first right, but not the obligation, to defend against any such action involving a vTv Patent Right and a Joint Patent Right in the Territory in its own name, and the costs of any such defense shall be at Newsoara's expense. vTv, upon request of Newsoara, agrees to join in any such action and to cooperate reasonably with Newsoara; provided that Newsoara shall promptly reimburse all out-of-pocket expenses (including reasonable counsel fees and expenses) actually incurred by vTv in connection with such cooperation. If Newsoara does not defend against any such action involving such vTv Patent Right or Joint Patent Right in the Territory, then vTv shall have the right, but not the obligation, to defend such action and any such defense shall be at vTv's expense. Newsoara, upon request of vTv, agrees to join in any such action and to cooperate reasonably with vTv, provided that vTv shall promptly reimburse all out-of-pocket expenses (including reasonable counsel fees and expenses) actually incurred by Newsoara in connection with such cooperation.

7.5 Claimed Infringement. Each of the Parties shall promptly notify the other in the event a Party becomes aware that the Development, Manufacture, having Manufactured, use or Commercialization of any Compound and/or Product in or for the Territory pursuant to this Agreement infringes the intellectual property rights of any Third Party, and shall promptly provide the other Party with any notice it receives or has received from a Third Party related to such suspected infringement ("Infringement of Third Party Rights Claim"). The Party subject to an Infringement of Third Party Rights Claim shall promptly notify the other Party in writing and shall discuss with the other Party the strategy for defending such Infringement of Third Party Rights Claim, but, subject to Sections 10.1, 10.2 and 10.3, shall have the right to direct and control the defense thereof in its sole discretion and at its own expense, with counsel of its choice; provided that, the other Party may participate in (but not direct or control) the defense and/or settlement thereof, at its own expense with counsel of its choice. In any event, the Party subject to such Infringement of Third Party Rights Claim agrees to keep the other Party hereto reasonably informed of all material developments in connection therewith. Both Parties agree not to settle such Infringement of Third Party Rights Claim, or make any admissions or assert any position in such Infringement of Third Party Rights Claim, in a manner that would materially adversely affect the allegedly infringing Compound and/or Product or the Development, Manufacture, having Manufactured, use or Commercialization of such Compound and/or Product in any country of the world, without the prior written consent of the other Party, which shall not be unreasonably withheld, delayed or conditioned. [***] of (i) any damage award and/or settlement amount arising from an Infringement of Third Party Rights Claim based on the practice by either Party of the vTv Intellectual Property with respect to the Compound and/or Product in or for the Territory, which is due to the Third Party by Newsoara, and (ii) attorney fees paid by Newsoara relating to such Infringement of Third Party Rights Claim, will be credited against the royalties that are due from Newsoara to vTv hereunder, subject to the limitations in Sections 6.5(d) and 6.5(e).

7.6 Patent Term Extensions. Newsoara shall have the exclusive right and obligation to seek patent term extensions or supplemental patent protection, including supplementary protection certificates, in any Region in the Territory in relation to the

Products at Newsoara's expense. vTv and Newsoara shall cooperate in connection with all such activities, and Newsoara, its agents and attorneys will give due consideration to all timely suggestions and comments of vTv regarding any such activities; provided that all final decisions shall be made by Newsoara.

7.7 Patent Marking. Newsoara shall comply with the patent marking statutes in each Region in the Territory in which the Product is sold by Newsoara, its Affiliates or its Sublicensees.

7.8 Product Trademarks. Newsoara will have the right to brand the Products in the Territory using trademarks, logos, and trade names it determines appropriate for the Products, which may vary by Region or within a Region (the "Product Marks"). Newsoara will own all rights in the Product Marks in the Territory and will register and maintain the Product Marks in the Territory that it determines reasonably necessary, at Newsoara's cost and expense. Newsoara will not utilize any Product Marks that are duplicative or derivative of any trademarks, logos, or trade names employed by vTv without vTv's consent. vTv will have the sole right to determine the international nonproproprietary name of the Products.

7.9 Certification under Drug Price Competition and Patent Restoration Act.

(a)Notice. If a Party becomes aware of any certification filed pursuant to 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 other than the US claiming that any vTv Patent Rights, Joint Patent Rights, or Newsoara Patent Rights Covering a Product in the Field are invalid or otherwise unenforceable, or that infringement will not arise from the manufacture, use, import or sale of a product by a Third Party (a "Paragraph IV Claim"), such Party shall promptly notify the other Party in writing within [***] Business Days after its receipt thereof.

(b)Control of Response; Recoveries.

(i)Newsoara shall have the first right, but not the obligation, to initiate and control patent infringement litigation for such Paragraph IV Claim in the Territory. Any suit by Newsoara shall be brought either in the name of vTv or its Affiliate, the name of Newsoara or its Affiliate, or jointly by Newsoara, vTv and their respective Affiliates, as may be required by the Law of the forum. For this purpose, vTv shall execute such legal papers and cooperate in the prosecution of such suit as may be reasonably requested by Newsoara; provided that Newsoara shall promptly reimburse all out-of-pocket expenses (including reasonable counsel fees and expenses) actually incurred by vTv in connection with such cooperation. If Newsoara elects not to assume control over litigating any Paragraph IV Claim in the Territory, Newsoara shall notify vTv as soon as practicable but in any event not later than [***] days before the first action required to litigate such Paragraph IV Claim so that vTv may, but shall not be required to, assume sole control over litigating such Paragraph IV Claim using counsel of its own choice. Any suit by vTv shall be either in the name of vTv or its Affiliate, the name of Newsoara or its Affiliate, or jointly by Newsoara, vTv and their respective Affiliates, as may be required by the Law of the forum. For this purpose, Newsoara shall execute such legal papers and cooperate in the prosecution of such suit as may be reasonably requested by vTv; provided

that vTv shall promptly reimburse all out-of-pocket expenses (including reasonable counsel fees and expenses) actually incurred by Newsoara in connection with such cooperation. Any compensation recovered as a result of such litigation shall be allocated as set forth in Section 7.3(e) above.

(ii)vTv shall have the first right, but not the obligation, to initiate and control patent infringement litigation for such Paragraph IV Claim outside the Territory. Any suit by vTv shall be brought either in the name of vTv or its Affiliate, the name of Newsoara or its Affiliate, or jointly by Newsoara, vTv and their respective Affiliates, as may be required by the Law of the forum. For this purpose, Newsoara shall execute such legal papers and cooperate in the prosecution of such suit as may be reasonably requested by vTv; provided that vTv shall promptly reimburse all out-of-pocket expenses (including reasonable counsel fees and expenses) actually incurred by vTv in connection with such cooperation. Any compensation recovered as a result of such litigation shall be allocated as set forth in Section 7.3(e) above.

7.10 Privileged Communications. In furtherance of this Agreement, it is expected that Newsoara and vTv will, from time to time, disclose to one another privileged communications with counsel, including opinions, memoranda, letters and other written, electronic and verbal communications. Such disclosures are made with the understanding that they shall remain confidential, that they will not be deemed to waive any applicable attorney-client or attorney work product or other privilege and that they are made in connection with the shared community of legal interests existing between vTv and Newsoara, including the community of legal interests in avoiding infringement of any valid, enforceable patents of Third Parties and maintaining the validity of vTv Patent Rights and Newsoara Patent Rights.

7.11 Foreign Filing Licenses. The Parties shall cooperate (i) to obtain any foreign patent filing licenses, and (ii) to first file any patent application(s) on a domestic invention in the country of origin, so as to comply with 35 U.S.C. §§181 to 188 or its successor provisions or any similar provision in a country other than the US.

ARTICLE VIII
CONFIDENTIAL INFORMATION

8.1 Treatment of Confidential Information. During the Term and for [***] years thereafter, each Party shall maintain Confidential Information (as defined in Section 8.2) of the other Party in confidence, and shall not disclose, divulge or otherwise communicate such Confidential Information to others (except for agents, directors, officers, employees, consultants, subcontractors, Affiliates, advisors, licensees, sublicensees, partners and potential licensees, sublicensees and partners (collectively, "Agents") under obligations of confidentiality) or use it for any purpose other than in connection with the Development or Commercialization of Compounds or Products pursuant to this Agreement, and each Party shall exercise Commercially Reasonable Efforts to prevent and restrain the unauthorized disclosure of such Confidential Information by any of its Agents, which 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 VIII by its

Agents. For clarity, Newsoara may disclose Confidential Information of vTv (a) to Governmental Authorities (i) to the extent desirable to obtain or maintain INDs or Regulatory Approvals for any Compound or Product within the Territory and (ii) in order to respond to inquiries, requests or investigations by Governmental Authorities; (b) to outside consultants, scientific advisory boards, managed care organizations, and non-clinical and clinical investigators to the extent necessary to Develop or Commercialize any Compound or Product; (c) to the extent useful to Develop or Commercialize any Compound or Product; and (d) to the extent necessary or useful in order to enjoy its rights under this Agreement (including to defend or prosecute litigation); provided that Newsoara shall obtain the same confidentiality obligations from any Third Parties to which it discloses the Confidential Information of vTv as it obtains with respect to its own similar types of confidential information.

8.2 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 Affiliate's or licensor's technology, products, business, financial status or prospects or objectives regarding the Products that is disclosed by a Party to the other Party. All information disclosed prior to the Effective Date by vTv to Newsoara pursuant to the Mutual Non-Disclosure Agreement by and between the Parties, dated as of December 19, 2016, as amended through the Effective Date (the "Confidentiality Agreement"), shall be deemed "Confidential Information" of vTv. For clarity, all data and information regarding Products and Compounds generated after the Effective Date by or on behalf of Newsoara, its Affiliates or their Sublicensees, shall be deemed "Confidential Information" of Newsoara. Notwithstanding the foregoing, there shall be excluded from the foregoing definition of Confidential 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; or

(b)either before or after the date of the disclosure to the receiving Party, becomes published or generally known to the public through no 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 disclosing Party's Confidential Information as demonstrated by contemporaneous written records of the receiving Party.

Notwithstanding the foregoing, the receiving Party may disclose the disclosing Party's Confidential Information if it is required to be disclosed to comply with applicable Laws, to defend or prosecute litigation or to comply with governmental regulations or the regulations or requirements of any stock exchange, provided that the receiving Party promptly provides prior notice of such disclosure to the other Party and uses Commercially Reasonable Efforts to avoid or minimize the degree of such disclosure.

8.3 Publications. The Parties recognize the desirability of publishing and publicly disclosing the results of clinical trials of pharmaceutical products. Accordingly, subject to coordination through designated representatives of each Party, the publishing Party shall be free to publicly disclose the results of clinical trials involving Compounds or Products arising out of this Agreement, subject to prior review by the non-publishing Party for issues of patentability and protection of its Confidential Information, in a manner consistent with all Laws applicable to the publishing Party and best industry practices. In addition, if one Party (the "Publishing Party") intends to publish articles in scientific or medical journals or to make presentations of the results of clinical trials involving Compounds or Products arising out of this Agreement, the Publishing Party shall provide the other party (the "Non-publishing Party") through the designated representatives of each Party at its earliest opportunity with any proposed abstracts, manuscripts or summaries of presentations that cover the results of Development of any Compound or Product. The Non-publishing Party shall respond promptly through its designated representative, and in any event no later than [***] days after receipt of such proposed publication or presentation, or such shorter period as may be required by the publication. The Publishing Party agrees to allow a reasonable period (not to exceed [***] days) to permit filings for patent protection and to otherwise address issues of Confidential Information or related competitive harm to the reasonable satisfaction of the Non-publishing Party. In addition, the Publishing Party will give due regard to comments furnished by the Non-publishing Party and such comments shall not be unreasonably rejected. Newsoara shall be responsible to assure that its Affiliates and licensees agree to equivalent undertakings in favor of vTv. All publications involving Compounds or Products arising pursuant to this Agreement shall be in accordance with any guidelines or strategies promulgated by the JDC, which shall include appropriate acknowledgement consistent with standard scientific practice of any contributions of each Party to the results being publicly disclosed.

8.4 Press Releases and Other Disclosures. The Parties hereby each approve the form of the press release set forth in Schedule 8.4 and will cooperate in the release thereof as soon as practicable after the Effective Date. The Parties also recognize that each Party may from time to time desire to issue additional press releases and make other public statements or disclosures regarding the subject matter of this Agreement. In such event, the Party desiring to issue an additional press release or make a public statement or disclosure shall provide the other Party with a copy of the proposed press release, statement or disclosure for review and approval in advance (except that neither Party shall have any obligation to disclose Confidential Information except to the extent required or permitted pursuant to this ARTICLE VIII). No other public statement or disclosure concerning the existence or terms of this Agreement shall be made, either directly or indirectly, by either Party, without first obtaining the written approval of the other Party. Once any public statement or disclosure has been approved in accordance with this Section 8.4, then either Party may appropriately communicate information contained in such permitted statement or disclosure. Notwithstanding the foregoing provisions of this Section 8.4, Schedule 8.4, or of this ARTICLE VIII, a Party may (a) disclose the existence and terms of this Agreement 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, and (b) disclose the existence

and terms of this Agreement under obligations of confidentiality to agents, advisors, contractors, investors and acquirors, and to potential agents, advisors, contractors, investors and acquirors, provided that such announcements do not entail disclosure of non-public technical or scientific information (which, for clarity, excludes clinical trial results that are subject to disclosure pursuant to Section 8.3) and the announcing Party provides the other Party with a copy of the proposed text of such announcement sufficiently in advance of the scheduled release or publication thereof to afford such other Party a reasonable opportunity to review and comment upon the proposed text. To the extent a Party determines in good faith that it is required by applicable Law to publicly file, register or notify this Agreement with a Governmental Authority, including public filings pursuant to securities Laws, it shall provide the proposed redacted form of the Agreement to the other Party a reasonable amount of time prior to filing for the other Party to review such draft and propose changes to such proposed redactions. The Party making such filing, registration or notification shall incorporate any proposed changes timely requested by the other Party, absent a substantial reason to the contrary, and shall use commercially reasonable efforts to seek confidential treatment for any terms that the other Party timely requests be kept confidential, to the extent such confidential treatment is reasonably available consistent with applicable Law. Each Party shall be responsible for its own legal and other external costs in connection with any such filing, registration or notification.

ARTICLE IX
REPRESENTATIONS, WARRANTIES AND COVENANTS

9.1 vTv's Representations. vTv hereby represents and warrants as of the Effective Date as follows:

(a)vTv 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 all necessary corporate action on the part of vTv. vTv 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 performance. Assuming due authorization, execution and delivery on the part of Newsoara, this Agreement constitutes a legal, valid and binding obligation of vTv, enforceable against vTv in accordance with its terms.

(b)The execution and delivery of this Agreement by vTv and the performance by vTv contemplated hereunder will not violate any US Law or, to vTv's knowledge, any Law of any Governmental Authority outside the US.

(c)Neither the execution and delivery of this Agreement nor the performance hereof by vTv requires vTv to obtain any permit, authorization or consent from any Governmental Authority or from any other Person, and such execution, delivery and performance by vTv will not result in the breach of or give rise to any termination of, rescission, renegotiation or acceleration under or trigger any other rights under any agreement or contract to which vTv may be a party that relates to the vTv Patent Rights in the Territory or the vTv Know-How.

(d)To vTv's knowledge, vTv owns or possesses adequate licenses or other valid rights to use all Patent Rights and Know-How necessary to Develop and Manufacture the vTv Compounds in the Territory and to use, sell, offer for sale and import Products containing the vTv Compounds in the Territory. To vTv's knowledge, there is no actual or threatened infringement by a Third Party of any of the vTv Patent Rights in the Territory, or any other infringement or threatened infringement by a Third Party that would adversely affect Newsoara's rights under this Agreement. To vTv's knowledge, the Development, Manufacture, use, sale, offer for sale or importation by Newsoara of the Product(s) containing HPP737 as Developed prior to the Effective Date does not and will not infringe or constitute a misappropriation or other violation of the rights of any Third Party. To vTv's knowledge, the issued patents encompassed within vTv Patent Rights in the Territory are valid and enforceable patents and no Third Party has challenged the validity or enforceability of such patents (including through the institution or written threat of institution of interference, nullity, revocation or similar invalidity proceedings before the US Patent and Trademark Office or any equivalent foreign entity), and vTv is not aware of any reasonable basis for such a claim by a Third Party.

(e)Schedule 1.68 is a complete and correct list of all vTv Patent Rights in the Territory owned by vTv as of the Effective Date. No vTv Patent Right in the Territory has been licensed to vTv.

(f)vTv is the sole legal and beneficial owner of all the vTv Patent Rights in the Territory identified on Schedule 1.68 and is entitled to grant the licenses thereto specified herein. All assignments to vTv of ownership rights relating to the vTv Patent Rights in the Territory owned by vTv are valid and enforceable. vTv has not previously assigned, transferred, conveyed or otherwise encumbered its right, title and interest in the vTv Intellectual Property in a manner that conflicts with any rights granted to Newsoara hereunder.

(g)There is no action, claim, demand, suit, proceeding, arbitration, grievance, citation, summons, subpoena, inquiry or investigation of any nature, civil, criminal, regulatory or otherwise, in law or in equity, pending or, to vTv's knowledge, threatened against vTv in connection with the vTv Compounds or any vTv Patent Rights in the Territory, vTv Know-How or against or relating to the transactions contemplated by this Agreement.

(h)To vTv's knowledge, all Development activities conducted by vTv prior to the Effective Date have been and are being conducted in material compliance with experimental protocols, procedures and controls pursuant to generally accepted professional scientific standards, and applicable local, state and federal Laws, rules, and regulations, including applicable requirements of GLP and GCP, as applicable. vTv has not received any written notices from the FDA or any other Regulatory Authority requiring the termination, suspension or material modification of any clinical trials that have been or are currently being conducted by vTv. Neither vTv nor, to the knowledge of vTv, any of its directors, officers, employees, agents or subcontractors has been convicted of any crime or engaged in any conduct that has resulted in, or would reasonably be expected to result, in debarment by the FDA under 21 U.S.C. § 335a or any similar state or foreign Law.

(i)To the knowledge of vTv, vTv has disclosed or made available to Newsoara all material information in its possession and Control relating to the Compound and

the Product, and the Development, Manufacture, use and Commercialization of the Compound and the Product as conducted prior to the Effective Date, including by providing or making available complete and correct copies of the following: (a) adverse event reports; (b) clinical study reports and material study data; and (c) FDA inspection reports, notices of adverse findings, warning letters, Regulatory Approval filings and other material regulatory documentation.

(j)To the knowledge of vTv, any material safety issue relating to the Compound or the Product has been disclosed to Newsoara.

9.2 Newsoara's Representations. Newsoara hereby represents and warrants as of the Effective Date as follows:

(a)Newsoara 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 all necessary corporate action on the part of Newsoara. Newsoara 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 respect to the Development and Commercialization of Compounds and Products) performance. Assuming due authorization, execution and delivery on the part of vTv, this Agreement constitutes a legal, valid and binding obligation of Newsoara, enforceable against Newsoara in accordance with its terms.

(b)The execution and delivery of this Agreement by Newsoara and the performance by Newsoara contemplated hereunder will not violate (subject to obtaining all necessary governmental approvals with respect to the continued Development and Commercialization of Compounds and Products) any Law of any Region in the Territory or, to Newsoara's knowledge, any Law of any other Governmental Authority in the Territory.

(c)There is no action, claim, demand, suit, proceeding, arbitration, grievance, citation, summons, subpoena, inquiry or investigation of any nature, civil, criminal, regulatory or otherwise, in law or in equity, pending or, to the knowledge of Newsoara, threatened against Newsoara in connection with or relating to the transactions contemplated by this Agreement.

(d)Neither the execution and delivery of this Agreement nor the performance hereof by Newsoara requires Newsoara to obtain any permit, authorization or consent from any Governmental Authority (subject to obtaining all necessary governmental approvals with respect to the continued Development and Commercialization of Compounds and Products) or from any other Person, and such execution, delivery and performance by Newsoara will not result in the breach of or give rise to any termination of, rescission, renegotiation or acceleration under or trigger any other rights under any agreement or contract to which Newsoara may be a party that relates to the Products, Newsoara Patent Rights or Newsoara Know-How.

(e)Neither Newsoara nor, to the knowledge of Newsoara, any of its directors, officers, employees, agents or subcontractors has been convicted of any crime or engaged in any

conduct that has resulted in, or would reasonably be expected to result, in debarment by the FDA under 21 U.S.C. § 335a or any similar state or foreign Law.

9.3 vTv Covenants. vTv covenants and agrees during the Term that, subject to Newsoara's, its Affiliates' and Sublicensees' performance of their obligations under this Agreement to the extent it affects vTv's performance of its obligations under this Agreement:

(a)vTv shall not grant to any Third Party any rights that would be inconsistent with Newsoara's rights hereunder.

(b)Subject to Section 12.8, vTv shall not assign, transfer, convey or otherwise encumber its right, title and interest in the vTv Intellectual Property in a manner that conflicts with any rights granted to Newsoara hereunder.

9.4 Newsoara Covenants. Newsoara will:

(a) comply, and will cause its Affiliates and Sublicensees to comply, with all applicable Laws and all applicable cGMP, GCP, GLP and GSP (or similar standards) in their conduct of the Development, Manufacturing, and Commercialization activities under this Agreement; and

(b) ensure that its Affiliates and Sublicensees do not transfer or divert the Compound or Product to an entity other than Newsoara, or an entity approved by Newsoara, in each case in a manner that would cause the sale of such Compound or Product in the chain of distribution (from Newsoara or its Affiliates or Sublicensees to the end user) to be excluded (except as an exception provided in the Net Sales definition) in the calculation of Net Sales, provided that for each unit of the Compound and/or Product, the inclusion of such sales in the calculation of Net Sales shall occur only once.

Upon reasonable notification, but no more than annually (provided that the foregoing frequency limit shall not apply if vTv has cause), vTv will have the right to conduct audits of Newsoara, and Newsoara will procure such right for vTv to audit Newsoara' s Affiliates and Sublicensees (either directly or through Newsoara and its designee), to ensure (y) compliance with applicable cGMP, GCP, GLP, and GSP standards, including on-site evaluations (to the extent permitting such evaluations is under the control of the audited Party), and (z) compliance with Section 9.1(b).

9.5 Language. The Parties agree that all communications, interactions, reporting, documentation, and dispute resolution to be conducted pursuant to this Agreement shall be in English. The Parties agree that Newsoara shall have the obligation at its expense to translate any Regulatory Approval in Chinese into English.

9.6 No Warranty. EXCEPT AS OTHERWISE EXPRESSLY SET FORTH IN THIS AGREEMENT, NEITHER PARTY MAKES ANY REPRESENTATION AND EXTENDS NO WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED. IN PARTICULAR, BUT WITHOUT LIMITATION, EXCEPT AS OTHERWISE EXPRESSLY SET FORTH IN THIS AGREEMENT, vTv MAKES NO

REPRESENTATION AND EXTENDS NO WARRANTY CONCERNING WHETHER ANY vTv COMPOUNDS ARE FIT FOR ANY PARTICULAR PURPOSE OR SAFE FOR HUMAN CONSUMPTION.

ARTICLE X
INDEMNIFICATION

10.1 Indemnification in Favor of vTv. Newsoara shall indemnify, defend and hold harmless the vTv Parties (as hereinafter defined) from and against any and all Losses incurred, suffered or sustained by any of the vTv Parties or to which any of the vTv Parties becomes subject as a result of any Third Party claim, action, suit, proceeding, liability or obligation (collectively, "Third Party Claims") arising out of, relating to or resulting from:

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

(b)the Development or Commercialization of Compounds or Products by Newsoara, its Affiliates or Sublicensees, including all Third Party Claims involving death or bodily injury caused or allegedly caused by the use of such a Compound or Product, and even if such a Compound or Product is altered for use for a purpose not intended (any and all such Losses "Product Liability"); or

(c)subject to Sections 6.5(d) and 7.5, any actual or alleged infringement of any trademark, Patent Right or other intellectual property right, or misappropriation of any trade secret, of any Third Party as a result of the Development or Commercialization of Compounds or Products by Newsoara or its Related Party inside the Territory; or

(d)the gross negligence or willful misconduct of any of the Newsoara Parties (as hereinafter defined) in connection with Newsoara's performance of this Agreement.

For purposes of this ARTICLE X, "vTv Parties" means vTv, its Affiliates and their respective licensors, agents, directors, officers, shareholders, licensees, sublicensees and employees; provided that, if the vTv Party seeking indemnification under this ARTICLE X is a shareholder, then the foregoing indemnification obligation shall be limited to Losses to the extent arising from Third Party Claims based on the circumstances described in clauses (a)-(e) above (as applicable) and defenses thereof based on the circumstances described in clauses (a)-(e) above (as applicable), and shall not include Losses to the extent arising from any claim or defense relating to such vTv Party's status as a shareholder.

The indemnification obligations set forth in this Section 10.1 shall not apply to the extent that any Loss is the result of (i) a breach of this Agreement by vTv or (ii) the gross negligence or willful misconduct of such vTv Party.

10.2 Indemnification in Favor of Newsoara. vTv shall indemnify, defend and hold harmless the Newsoara Parties from and against any and all Losses incurred, suffered or sustained by any of the Newsoara Parties or to which any of the Newsoara

Parties becomes subject as a result of any Third Party Claim arising out of, relating to or resulting from:

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

(b)the Development or Commercialization of Compounds or Products by vTv, its Affiliates or Sublicensees, including all Third Party Claims involving Product Liability; or

(c)any actual or alleged infringement of any trademark, Patent Right or other intellectual property right, or misappropriation of any trade secret, of any Third Party as a result of the Development or Commercialization of Products containing HPP737 outside the Territory; or

(d)the gross negligence or willful misconduct of any of the vTv Parties in connection with vTv's performance of this Agreement.

For purposes of this ARTICLE X, "Newsoara Parties" means Newsoara, its Affiliates and their respective agents, directors, officers, shareholders, licensees, sublicensees and employees provided that, if the Newsoara Party seeking indemnification under this ARTICLE X is a shareholder, then the foregoing indemnification obligation shall be limited to Losses to the extent arising from Third Party Claims based on the circumstances described in clauses (a)-(c) above (as applicable) and defenses thereof based on the circumstances described in clauses (a)-(c) above (as applicable), and shall not include Losses to the extent arising from any claim or defense relating to such Newsoara Party's status as a shareholder.

The indemnification obligations set forth in this Section 10.2 shall not apply to the extent that any Loss is the result of (i) a breach of this Agreement by Newsoara, or (ii) the gross negligence or willful misconduct of such Newsoara Party.

10.3 General Indemnification Procedures. Subject to Section 7.3(b) above:

(a)A Person seeking indemnification pursuant to this ARTICLE X (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 Newsoara Party or any vTv 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 the initial and continuing satisfaction of the terms and conditions

of this ARTICLE X, 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 10.3, 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 Indemnifying Parties be unable to mutually agree on which of them shall assume the lead role in the defense of such Third Party Claim, both Indemnifying Parties shall be entitled to participate in such defense through counsel of their respective choosing.

(b)Any Indemnified Party or Indemnifying 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 managing the defense 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 such Indemnifying Party; provided, however, that if the Indemnifying Party managing the defense fails to take reasonable steps necessary to defend such Third Party Claim, the Indemnified Party may assume its own defense, and the Indemnifying Party managing the defense 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 an Indemnified Party arising from any such 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 or the Indemnified Party, enter into any compromise or settlement that commits the other Party or the Indemnified 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; provided, however, that the Indemnifying Party shall reimburse the Indemnified Party for any out-of-pocket expenses actually and reasonably incurred in connection with any such cooperation.

(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 X, 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 the Indemnifying Party.

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

10.4 Insurance. During the Term and thereafter for so long as a Third Party Claim may be brought for which Newsoara must indemnify vTv pursuant to Section 10.1, Newsoara 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 shall insure against all liability, including product liability and property damage arising out of the Development, use or Commercialization of Compounds and Products in the Territory. Without limiting the generality of the foregoing, Newsoara 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 Compounds and Products. Newsoara shall provide satisfactory evidence of adequate insurance coverage to vTv upon the request of vTv prior to the Effective Date and, upon the written request of vTv, concurrent with any renewal or replacement of such coverage.

ARTICLE XI
TERM AND TERMINATION

11.1 Term. The term of this Agreement (the "Term") shall commence on the Effective Date and, unless earlier terminated as provided in this ARTICLE XI, shall continue in full force and effect, on a Region-by-Region and Product-by-Product basis until there is no remaining royalty obligation in such Region with respect to such Product, at which time (unless earlier terminated) this Agreement shall expire with respect to such Product in such Region and Newsoara shall have a fully paid-up license under the vTv Intellectual Property and vTv's interest in the Joint Intellectual Property with respect to such Product in such Region. This Agreement shall terminate in its entirety on the date this Agreement has expired with respect to all Products in all Regions in the Territory.

11.2 Termination for Convenience. Newsoara shall have the right upon [***] days prior written notice to vTv to terminate this Agreement in its entirety for any reason.

11.3 Termination for Cause. In the event of a material breach of this Agreement by a Party, the other Party may give the Party in default notice requiring it to cure such default, which notice shall specify the nature of the breach. If such material breach is not cured within [***] days after receipt of such notice (or within [***] days in the case of a payment breach), the notifying Party shall be entitled (without prejudice to any of its other rights conferred on it by this Agreement or under applicable Law) to terminate this Agreement by giving written notice to the defaulting Party. The right of either Party to terminate this Agreement as set forth in this Section 11.3 shall not be affected in any way by its waiver of, or failure to take action with respect to, any previous default. If a material breach pertains only to facts relating to one or more Regions and does not involve a breach of any payment obligation hereunder then, pursuant to this Section 11.3, the notifying Party shall have a right to terminate this Agreement only with respect to such Regions.

11.4 Termination for Insolvency. This Agreement may be terminated by a Party upon written notice to the other Party if (a) the other Party 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 or statute of any jurisdiction, whether now or hereafter in effect; or (b) if there shall have been filed against the other Party 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 the other Party 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 for it 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; or (d) anything analogous to any of the foregoing occurs in any applicable jurisdiction. Termination shall be effective upon the date specified in such notice.

11.5 Consequences of Termination. If this Agreement is terminated by Newsoara under Section 11.2, by either Party under Section 11.3 or 11.4, then, for all Products and Regions to which such termination applies, the licenses granted to Newsoara in Section 2.1 shall terminate and Newsoara shall grant, and shall cause any applicable Affiliate or Sublicensee to grant, vTv any combination of the following elected by vTv:

(a)Regulatory Matters. Ownership of all Regulatory Filings and Regulatory Approvals relating to Compounds and Products, including related correspondence with Regulatory Authorities, and provide copies thereof; to the extent that transfer of the ownership of any Regulatory Filings or Regulatory Approvals relating to Compounds and Products is not feasible under the applicable Laws in the Territory, Newsoara shall assist vTv in including vTv's name on relevant Regulatory Filings and Regulatory Approvals or withdraw or cancel such Regulatory Filings or Regulatory Approvals, and shall cause any applicable Affiliate or Sublicensee to assist vTv in including vTv's name on relevant Regulatory Filings and Regulatory Approvals or withdraw or cancel such Regulatory Filings or Regulatory Approvals, in each instance, at vTv's option;

(b)Pre-clinical and Clinical Matters. To the extent feasible under applicable Laws, ownership and possession of all pre-clinical and clinical data, including pharmacology and biology data, using the items listed in Schedule 11.5(b) as a guide, in Newsoara's or its applicable Affiliates' or Sublicensees' Control exclusively relating to Compounds and Products, and reasonable access to and right to use (only for purposes of the Development and Commercialization of Compounds and Products) any such other data that relates non-exclusively to Compounds and Products;

(c)Manufacturing Matters. At vTv's option, to be exercised no later than the later of (x) thirty (30) days after the effective date of termination or (y) thirty (30) days after vTv's receipt of the applicable Manufacturing agreements,

(i)use of Commercially Reasonable Efforts by Newsoara and use Commercially Reasonable Efforts to cause its Affiliates and Sublicensees to effect the assignment of each Manufacturing agreement specific and exclusive to Compounds or Products to vTv, if such agreement is then in effect and such assignment is permitted under such agreement or by the applicable Third Party; provided that Newsoara and its applicable Affiliates and Sublicensees shall be released to the extent the applicable Third Party will permit from any obligation arising out of such agreement following such assignment and vTv shall execute such documentation reasonably satisfactory to Newsoara to effectuate such agreement; provided further that, if any such agreement is specific but not exclusive to Compounds or Products, or is not assigned to vTv for any reason, Newsoara and its Affiliates and Sublicensees shall use Commercially Reasonable Efforts to provide vTv with the benefits of such agreement to the extent it relates to Compounds or Products;

(ii)for a period of up to [***] months following the effective date of termination, (A) cooperation with vTv in reasonable respects to transfer Manufacturing documents and materials that are used (at the time of the termination) by Newsoara or its Affiliates or Sublicensees exclusively in the Manufacture of Compounds and Products to the extent such Manufacturing documents and materials are not obtained by vTv pursuant to the assignment of agreements pursuant to paragraph (i) above, and (B) to provide vTv with reasonable access to and right to use such Manufacturing documents and materials to the extent they relate to, but are not used exclusively in, the Manufacture of Compounds and Products;

(iii)for a period of up to [***] months following the effective date of termination, (A) cooperation with vTv in reasonable respects to transfer Manufacturing technologies that are used (at the time of the termination) and Controlled by Newsoara or its Affiliates or Sublicensees exclusively in the Manufacture of Compounds and Products, and (B) to provide vTv with reasonable access to and right to use such Manufacturing technologies to the extent they relate to, but are not used exclusively in, the Manufacture of Compounds and Products; provided that vTv shall reimburse Newsoara for Newsoara's reasonable out-of-pocket expenses to provide such requested assistance, to the extent such Manufacturing technologies are not obtained by vTv pursuant to the assignment of agreements pursuant to paragraph (i) above; and

(iv)sale of Newsoara's then-existing inventory of Compounds and Products to vTv, at Newsoara's or its applicable Affiliates' (a) cost of Manufacture and (b) the price at which Newsoara purchases such Product from its Third Party manufacturer, in each case (a) and (b) plus [***] thereof, but only if the following conditions have been met: (A) such Compounds and Products meets the applicable release specifications; and (B) Newsoara does not reasonably believe the continued use of such Compounds and Products causes safety concerns.

(d)License Grant. At vTv's option, to be exercised no later than thirty (30) days after the effective date of termination, Newsoara shall grant to vTv an exclusive, fully paid up, non-royalty-bearing, irrevocable, perpetual license to vTv, with the right to sublicense, under the Newsoara Patent Rights, Newsoara Know-How and Newsoara's interest in the Joint Intellectual Property solely to make, have made, use, sell, offer for sale and import Compounds and Products in the Field that were Developed or Commercialized prior to the effective date of termination; provided that, with respect to any Newsoara Patent Rights or Newsoara Know-How

that Newsoara acquired from a Third Party (by license or otherwise), Newsoara shall only be required to grant to vTv a license to such Newsoara Patent Rights or Newsoara Know-How to the extent permitted under its agreement with such Third Party, and vTv shall pay Newsoara or such Third Party, as determined by Newsoara, any payment due to such Third Party relating to the Compounds and Products; provided further that vTv shall execute such documentation reasonably satisfactory to Newsoara to effectuate such agreement; and vTv shall have the same enforcement rights with respect to any Newsoara Patent Rights that exclusively Cover Products that are licensed to vTv pursuant to this Section 11.5(d) as Newsoara has with respect to Infringement Claims pursuant to Section 7.3, provided that any enforcement of Newsoara Patent Rights or Joint Patent Rights that Cover subject matter other than such Products shall be performed by vTv with the consultation and prior agreement of Newsoara.

(e)Assignment of Trademarks. Assign to vTv all of Newsoara's right, title and interest in any trademark used solely in connection with the Products, along with all associated goodwill.

11.6 Additional Consequences of Termination.

(a)If this Agreement is terminated by Newsoara under Section 11.3 based on an uncured material breach by vTv or a Third Party Licensee, vTv shall pay to Newsoara the greater of: (a) the damages arising from the uncured material breach; or (b) a royalty equal to [***] of the royalty rate (as set forth in Section 6.5(a)) of net sales (with the same meaning as "Net Sales," *mutatis mutandis*) of the unauthorized Product sold in the Territory, and the provisions of Sections 6.5 through 6.11 and the defined terms therein shall apply, *mutatis mutandis*, with the references to "vTv" and "Newsoara" switched.

(b)If this Agreement is acquired by a Third Party from vTv, whether by way of merger, acquisition, acquisition of all or substantially all of vTv's business or assets relating to the subject matter of this Agreement or assignment hereof by vTv to such Third Party, and after such transfer this Agreement is terminated by Newsoara under Section 11.3 based on the Third Party's uncured material breach, such Third Party acquirer shall pay to Newsoara: (i) the greater of (a) the damages arising from the uncured material breach; or (b) a royalty equal to [***] of the royalty rate (as set forth in Section 6.5(a)) of net sales (with the same meaning as "Net Sales," *mutatis mutandis*) of the unauthorized Product sold in the Territory, and the provisions of Sections 6.5 through 6.11 and the defined terms therein shall apply, *mutatis mutandis*, with the references to "vTv" and "Newsoara" switched; and (ii) [***] of all upfront fees and milestone payments under Sections 6.1 and 6.3 that have been paid by Newsoara.

11.7 Effect of Termination; Accrued Rights and Obligations. Termination of this Agreement for any reason shall not release either Party from any liability that, at the time of such termination, has already accrued or that is attributable to a period prior to such termination (including payment obligations accrued prior to the effective date of termination pursuant to ARTICLE VI) 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. Notwithstanding the foregoing, the Parties agree that no milestone payment under Section 6.3 or 6.4 shall be due if the milestone event or sales threshold, as applicable, is not achieved or met prior to the date a notice of termination under this

ARTICLE XI is provided by the terminating Party. 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.

11.8 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, Sections 2.2, 2.3, 6.6, 6.7, 6.8, 6.9, 6.10, 6.11, 8.1, 8.2, ARTICLE X, and Sections 11.5, 11.6, 11.7, 11.8, 12.1, 12.2, 12.3, 12.4, 12.8, 12.10, 12.11, 12.12, 12.13 and 12.15 shall survive expiration or termination of this Agreement for any reason.

ARTICLE XII
MISCELLANEOUS

12.1 Governing Law; Jurisdiction. This Agreement shall be governed by and interpreted in accordance with the internal laws of the State of New York, without regard to its conflicts of laws rules. Subject to Section 12.2, each Party shall have the right to institute judicial proceedings against the other Party or anyone acting by, through or under such other Party, in any court of competent jurisdiction, in order to enforce the instituting Party's rights hereunder through reformation of contract, specific performance, injunction or similar equitable relief.

12.2 Dispute Resolution; Arbitration.

(a)Dispute Resolution. In the event of a dispute arising out of or relating to this Agreement, either Party shall provide written notice of the dispute to the other, in which event the dispute shall be referred to the Senior Executives of each Party, for attempted resolution by good faith negotiations within twenty (20) days after such notice is received. In the event the Senior Executives do not resolve such dispute within the allotted twenty (20) days, either Party may, after the expiration of the twenty (20) day period, seek to resolve the dispute through arbitration in accordance with Section 12.2(b).

(b)Arbitration.

(i)Claims. Any claim, dispute, or controversy of whatever nature arising between the Parties out of or relating to this Agreement that is not resolved under Section 12.2(a) within the required twenty (20) day time period, including any action or claim based on tort, contract, or statute (including any claims of breach or violation of statutory or common law protections from discrimination, harassment and hostile working environment), or concerning the interpretation, effect, termination, validity, performance or breach of this Agreement ("Claim"), shall be resolved by final and binding arbitration before a panel of three (3) experts with relevant industry experience (the "Arbitrators"). Each of vTv and Newsoara shall promptly select one Arbitrator each, which selections shall in no event be made later than thirty (30) days after the

notice of initiation of arbitration. The third Arbitrator shall be chosen promptly by mutual agreement of the Arbitrator chosen by vTv and the Arbitrator chosen by Newsoara, but in no event later than thirty (30) days after the date that the last of such Arbitrators was appointed. The arbitration shall be administered by the Hong Kong International Arbitration Centre ("HKIAC") in accordance with its then current Commercial Rules of HKIAC including the Procedures for Large, Complex Commercial Disputes (including the Optional Rules for Emergency Measures of Protection). The arbitration shall be held in Hong Kong and the Parties shall use Commercially Reasonable Efforts to expedite the arbitration if requested by either Party.

(ii)Arbitrators' Award. The Arbitrators shall, within fifteen (15) days after the conclusion of the arbitration hearing, issue a written award and statement of decision describing the essential findings and conclusions on which the award is based, including the calculation of any damages awarded. The decision or award rendered by the Arbitrators shall be final and non-appealable, and judgment may be entered upon it in accordance with applicable Law in the State of New York or any other court of competent jurisdiction. The Arbitrators shall be authorized to award compensatory damages, but shall not be authorized to reform, modify or materially change this Agreement or any other agreements contemplated hereunder.

(iii)Costs. Each Party shall bear its own counsel fees, costs, and disbursements arising out of the arbitration and the costs of the Arbitrator selected by it, and shall pay an equal share of the fees and costs of the third Arbitrator and all other general fees related to the arbitration; provided, however, the Arbitrators shall be authorized to determine whether a Party is the prevailing Party, and if so, to award to that prevailing Party reimbursement for its reasonable counsel fees, costs and disbursements (including expert witness fees and expenses, photocopy charges, or travel expenses), or the fees and costs of HKIAC and the Arbitrators.

(iv)Compliance with this Agreement. Unless the Parties otherwise agree in writing, during the period of time that any arbitration proceeding is pending under this Agreement, the Parties shall continue to comply with all those terms and provisions of this Agreement that are not the subject of the pending arbitration proceeding.

(v)Injunctive or Other Equity Relief. Nothing contained in this Agreement shall deny any Party the right to seek injunctive or other equitable relief from a court of competent jurisdiction in the context of a *bona fide* emergency or prospective irreparable harm, and such an action may be filed and maintained notwithstanding any ongoing arbitration proceeding.

12.3 Waiver. Waiver by a Party of a breach hereunder by the other Party 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 hereunder shall operate as a waiver of any right, power or privilege by such Party. 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 of the Party granting the waiver.

12.4 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 12.4 and shall be: (a) delivered personally; (b) sent by registered or certified mail, return receipt requested, postage prepaid; (c) sent via a reputable nationwide overnight courier service; or (d) sent by electronic mail or 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 nationwide overnight courier service, or when transmitted with electronic confirmation of receipt, if transmitted by electronic mail or facsimile (if such transmission is on a Business Day; otherwise, on the next Business Day following such transmission).

Notices to Newsoara shall be addressed to:

Newsoara Biopharma Co., Ltd.,
Room 302-22, Building No. 1, 800 Na Xian Road
Shanghai Free Trade Zone, China
ATTN: Benny Li

Notices to vTv shall be addressed to:

vTv Therapeutics LLC
4170 Mendenhall Oaks Pkwy
High Point, NC 27265
ATTN: Law Department

Either Party may change its address by giving notice to the other Party in the manner provided above.

12.5 Entire Agreement. This Agreement (including Schedules) contains the complete understanding of the Parties with respect to the Development and Commercialization of Compounds and Products and supersedes all prior understandings and writings between the Parties relating to such subject matter. In particular, and without limitation, it supersedes and replaces the Confidentiality Agreement and any and all term sheets relating to the transactions contemplated by this Agreement and exchanged between the Parties prior to the Effective Date.

12.6 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.

12.7 Registration, Filing and Disclosure of the Agreement. To the extent a Party (a) determines in good faith that it is required by applicable Law to publicly file,

register or notify this Agreement with a Governmental Authority, including public filings pursuant to securities Laws or (b) desires to disclose the terms of this Agreement to investors and sublicensees, and to potential investors and sublicensees, in each case, pursuant to obligations of confidentiality no less stringent than set forth in this Agreement, in connection with such Party's activities hereunder and in connection with such Party's financing activities, in each case of clause (a) and (b) above, it shall either (i) provide only a redacted form of this Agreement that excludes financial and diligence terms and the requirements for termination for convenience set forth in Section 11.2 (the "Standard Redaction"), or (ii) provide a proposed redacted draft of the Agreement with less redaction than the Standard Redaction to the other Party with a reasonable amount of time prior to filing or disclosure for the other Party to approve such draft, such approval not to be unreasonably withheld, and, for clarity, shall not be required to provide the other Party the name of any Third Party receiving disclosure or the purpose of such disclosure; provided that such other Party may propose reasonable changes to such proposed redactions. With respect to (ii), the Party making such filing, registration, notification or disclosure shall incorporate any proposed changes timely and reasonably requested by the other Party, absent a substantial reason to the contrary, and shall use Commercially Reasonable Efforts to seek confidential treatment for any terms that the other Party timely requests be kept confidential, to the extent such confidential treatment is applicable and reasonably available consistent with applicable Law. Each Party shall be responsible for its own legal and other external costs in connection with any such filing, registration or notification.

12.8 Assignment. Neither this Agreement nor any right or obligation hereunder may be assigned or otherwise transferred by either Party without the consent of the other Party, not to be unreasonably withheld; provided, however, that either Party may, without such consent, assign this Agreement, in whole or in part: (a) to any of its respective Affiliates, provided that such Affiliate has acknowledged and confirmed in writing that effective as of such assignment, such Affiliate shall be bound by this Agreement to the identical extent applicable to the assigning Party and the assigning Party remains primarily liable for the Affiliate's performance of its obligations hereunder; or (b) to any successor in interest by way of merger, acquisition or sale of all or substantially all of its business or assets relating to the subject matter of this Agreement, provided that such successor agrees in writing to be bound by the terms of this Agreement to the identical extent applicable to the assigning Party. Any purported assignment in violation of this Section 12.8 shall be void. Any permitted assignee shall assume all obligations of its assignor under this Agreement.

12.9 Counterparts; Exchange by Facsimile. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original and that together shall constitute one and the same instrument. Such counterparts may be exchanged by facsimile or PDF (provided that each executed counterpart is transmitted in one complete transmission or electronic mail message). Where there is an exchange of executed counterparts by facsimile or PDF, each Party shall be bound by the Agreement notwithstanding that original copies of the Agreement may not be exchanged immediately. The Parties shall cooperate after execution of the Agreement and

exchange by facsimile or PDF to ensure that each Party obtains an original executed copy of this Agreement with reasonable promptness.

12.10 Force Majeure. No Party shall be liable for failure of or delay in performing obligations set forth in this Agreement, and no Party shall be deemed in breach of its obligations, if such failure or delay is due to a natural disaster, explosion, fire, flood, tornadoes, thunderstorms, earthquake, war, terrorism, riots, embargo, losses or shortages of power, labor stoppage, substance or material shortages, damage to or loss of product in transit not due to a failure by such Party or its Affiliates to exercise reasonable care, events caused by reason of Laws of any Governmental Authority, events caused by acts or omissions of a Third Party not induced or solicited by such Party or its Affiliates, or any other cause reasonably beyond the control of such Party or its Affiliates; provided that such Party uses Commercially Reasonable Efforts to overcome the difficulties created by such force majeure event and to resume performance of its obligations as soon as practicable.

12.11 Third-Party Beneficiaries. None of the provisions of this Agreement shall be for the benefit of or enforceable by any Third Party other than a vTv Party or a Newsoara Party, as applicable, that is an Indemnified Party under ARTICLE X, and no Third Party shall obtain any right under any provision of this Agreement or shall by reason of any such provision make any claim in respect of any debt, liability or obligation (or otherwise) against either Party.

12.12 Relationship of the Parties. Each Party shall bear its own costs incurred in the performance of its obligations hereunder without charge or expense to the other, except as expressly provided in this Agreement. Neither Party shall have any responsibility for the hiring, termination or compensation of the other Party's employees or for any employee compensation or benefits of the other Party's employees. No employee or representative of a Party shall have any authority to bind or obligate the other Party for any sum or in any manner whatsoever, or to create or impose any contractual or other liability on the other Party without said other Party's approval. 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.

12.13 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.

12.14 Compliance with Law. Each Party and its Affiliates shall conduct, and shall use Commercially Reasonable Efforts to cause its Related Parties, contractors and consultants to conduct, all of its activities contemplated under this Agreement in accordance with all applicable Laws of the country in which such activities are conducted, as well as the US Foreign Corrupt Practices Act, and all export control and sanctions Law of the United States. In addition, each Party shall not, shall ensure that its Affiliates do not, and shall use Commercially Reasonable Efforts to cause its Related

Parties, contractors and consultants not to, take any action that would cause the other Party to violate any applicable anti-corruption or sanctions Laws.

12.15 No Consequential or Punitive Damages. NEITHER PARTY 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 12.15 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, OR THE WILLFUL MISCONDUCT, INTENTIONAL BREACH OR FRAUD OF THE OTHER PARTY.

[Signature page follows]

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

NEWSOARA BIOPHARMA CO., LTD.	**VTV THERAPEUTICS LLC**
By:	By:
Name:	Name:
Title:	Title:

Schedule 1.17

Development Plan

[***]

Schedule 1.28

Structure of HPP737

[***]

Schedule 1.68

vTv Patent Rights

[***]

Docket No.	Country	Application No.	Filing Date	Patent No.	Issue Date	Status
[***]	[***]	[***]	[***]	[***]	[***]	[***]

Schedule 4.2

Commercialization Plan

- **[***]**

Schedule 6.10

Invoice for Initial License Payment

[***]

Schedule 8.4

Form of Press Release

Schedule 11.5(b)

Transition of Pre-Clinical and Clinical Matters

[***]

FORM

OF

SECURITIES PURCHASE AGREEMENT

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

RECITALS

WHEREAS, the Company and the Purchaser are parties to that certain Letter Agreement dated as of December 5, 2017 (the "Letter Agreement");

WHEREAS, pursuant to the terms of the Letter Agreement, the Purchaser provided an investment commitment to invest in the Company, at either party's option, up to $10,000,000, in exchange for Company Class A common stock, par value $0.01, currently listed on NASDAQ (the "Common Stock") at a per share price equal to $4.38;

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

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

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

   a. Purchase and Sale of Securities. Subject to the terms and conditions hereof, at the Closing (as herein defined), the Company shall issue and sell to the Purchaser, and the Purchaser shall purchase from the Company, the Shares at a purchase price per Share of $4.38 in cash, for an aggregate amount of $[_____] (the "Purchase Price").

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

2. **Closings and Deliverables**.

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

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

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

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

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

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

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

d. Nasdaq Compliance. Except as set forth in Section 3.d.I. below, the Company is, and immediately following the issuance of the Shares pursuant to this Agreement will be, in compliance with all applicable NASDAQ Marketplace Rules.

I. On May 2, 2018, the Company received a letter from The NASDAQ Stock Market LLC notifying the Company that it is not in compliance with the requirement of NASDAQ Rule 5450(b)(2)(A) as a result of the market value of the Company's listed securities being below $50 million for 30 consecutive business days.

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

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

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

c. Investment in Securities. The Purchaser:

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

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

understanding exists with any other persons regarding the public sale or distribution of any Shares; and

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

d. Exemptions. The Purchaser understands that the Shares are being issued to it in reliance upon a specific exemption from the registration requirements of Securities Act, the rules and regulations and state securities laws, and that the Company is relying upon the truth and accuracy of, and the Purchaser's compliance with, the representations, warranties, agreements, acknowledgments and understandings of the Purchaser set forth herein in order to determine the availability of such exemption and the eligibility of the Purchaser to acquire the Shares. The Purchaser agrees that it is an "accredited investor" (as such term is defined in Rule 501 of Regulation D promulgated under the Securities Act).

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

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

THE TRANSFER OF THESE SECURITIES HAS NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR UNDER THE SECURITIES LAWS OF ANY OTHER JURISDICTION, AND MAY NOT BE SOLD OR TRANSFERRED OTHER THAN IN ACCORDANCE WITH THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT OF 1933, AS AMENDED (OR OTHER APPLICABLE LAW), OR AN EXEMPTION THEREFROM.

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

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

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

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

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

5. Indemnification.

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

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

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

6. Miscellaneous.

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

b. No Waiver; Modifications in Writing. No failure or delay by a party in exercising any right, power or remedy hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any such right, power or remedy preclude any other or further exercise thereof or the exercise of any other right, power or remedy. Except as otherwise expressly provided herein with respect to any right of indemnification, the remedies provided for herein are cumulative and are not exclusive of any remedies that may be available to any party at law or in equity or otherwise. No waiver of or consent to any departure by a party from any provision of this Agreement shall be effective unless signed in writing by the parties entitled to the benefit thereof. No amendment, modification or termination of any provision of this Agreement shall be effective unless signed in writing by all parties. Any amendment, supplement or modification of or to any provision of this Agreement, any waiver of any provision of this Agreement, and any consent to any departure from the terms of any provision of this Agreement, shall be effective only in the specific instance and for the specific purpose for which made or given.

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

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

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

f. Consent to Jurisdiction and Service of Process. Any suit, action or proceeding arising out of or relating to the Agreement or the transactions contemplated hereby may be instituted in any federal court situated in the State of New York or any state court of the State of New York, and each party agrees not to assert, by way of motion, as a defense or otherwise, in any such suit, action or proceeding, any claim that it is not subject personally to the jurisdiction of such court, that the suit, action or proceeding is brought in an inconvenient forum, that the venue of the suit, action or proceeding is improper or that the Agreement or the subject matter hereof or thereof may not be enforced in or by such court. Each party further irrevocably submits to the jurisdiction of such court in any such suit, action or proceeding. Nothing herein contained shall be deemed to affect the right of any party to serve process in any manner permitted by law or to commence legal proceedings or otherwise proceed against any other party in any other jurisdiction.

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

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

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

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

k. Enforcement. The Purchaser acknowledges that the Company will be irreparably damaged if the provisions of this Agreement applicable to the Purchaser are not specifically enforced. If the Purchaser shall default in any of its obligations under

this Agreement or if any representation or warranty made by or on behalf of the Purchaser in this Agreement or in any certificate, report or other instrument delivered under or pursuant to any term hereof or thereof shall be untrue or misleading as of the date made, the Company may proceed to protect and enforce its rights by suit in equity or action at law (without the posting of any bond and without proving that damages would be inadequate), whether for the specific performance of any term contained in this Agreement, injunction against the breach of any such term or in furtherance of the exercise of any power granted in this Agreement, or to enforce any other legal or equitable right of the Company or to take any one of more of such actions. The Company shall be permitted to enforce specifically the terms and provisions hereof in any court of the United States or any state thereof or any other court having jurisdiction, this being in addition to any other remedy to which the Company may be entitled at law or in equity or otherwise.

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

[SIGNATURE PAGE FOLLOWS]

COUNTERPART SIGNATURE PAGE

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

PURCHASER:

MACANDREWS & FORBES GROUP LLC

By: _____

Name:

Title:

Address:

COUNTERPART SIGNATURE PAGE

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

VTV THERAPEUTICS INC.

By: _____

Name:

Title:

Address:

Exhibit 31.1

SECTION 302 CERTIFICATION

I, Stephen L. Holcombe, certify that:

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

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

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

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

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

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

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

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

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

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

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

Date: August 3, 2018

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 3, 2018

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, 2018 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 3, 2018

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, 2018 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 3, 2018

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