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, 2020

or

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

For the transition period from _____ to _____

Commission file number: 000-50633

CYTOKINETICS, INCORPORATED

(Exact name of registrant as specified in its charter)

Delaware	**94-3291317**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
280 East Grand Avenue South San Francisco, California	**94080**
(Address of principal executive offices)	**(Zip Code)**

Registrant's telephone number, including area code: (650) 624-3000

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

Title of each class	**Trading symbol**	**Name of each exchange on which registered**
Common Stock, $0.001 par value	**CYTK**	**The Nasdaq Global Select Market**

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

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

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

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

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

Number of shares of common stock, $0.001 par value, outstanding as of August 3, 2020: 70,504,701

CYTOKINETICS, INCORPORATED
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FOR THE THREE MONTHS ENDED JUNE 30, 2020

PART I. FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

CYTOKINETICS, INCORPORATED
CONDENSED CONSOLIDATED BALANCE SHEETS
(In thousands, except per share data) (Unaudited)

	June 30, 2020	December 31, 2019
ASSETS		
Current assets:		
Cash and cash equivalents	$ 61,134	$ 36,433
Short-term investments	151,929	188,679
Accounts receivable	2,254	5,163
Prepaid expenses and other current assets	3,637	3,477
Total current assets	218,954	233,752
Long-term investments	—	42,650
Property and equipment, net	5,611	4,530
Operating lease right-of-use assets and other assets	7,930	8,882
Total assets	$ 232,495	$ 289,814
LIABILITIES AND STOCKHOLDERS' DEFICIT		
Current liabilities:		
Accounts payable	$ 2,920	$ 8,160
Accrued liabilities	13,688	12,123
Short-term lease liability	5,075	4,616
Other current liabilities	1,013	1,124
Total current liabilities	22,696	26,023
Term loan, net	45,631	45,052
Convertible notes, net	86,743	84,205
Liability related to the sale of future royalties, net	154,914	143,276
Long-term lease liability	591	2,195
Total liabilities	310,575	300,751
Commitments and contingencies		
Stockholders' deficit:		
Preferred stock, $0.001 par value	—	—
Common stock, $0.001 par value	60	59
Additional paid-in capital	865,724	853,341
Accumulated other comprehensive income	1,337	679
Accumulated deficit	(945,201)	(865,016)
Total stockholders' deficit	(78,080)	(10,937)
Total liabilities and stockholders' deficit	$ 232,495	$ 289,814

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

CYTOKINETICS, INCORPORATED
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS
(In thousands, except per share data) (Unaudited)

	Three Months Ended		Six Months Ended	
	June 30, 2020	June 30, 2019	June 30, 2020	June 30, 2019
Revenues:				
Research and development revenues	$ 3,593	$ 7,137	$ 7,418	$ 15,601
Total revenues	3,593	7,137	7,418	15,601
Operating expenses:				
Research and development	21,790	24,017	43,528	47,562
General and administrative	14,161	9,836	26,610	19,273
Total operating expenses	35,951	33,853	70,138	66,835
Operating loss	(32,358)	(26,716)	(62,720)	(51,234)
Interest expense	(3,892)	(1,377)	(7,969)	(2,547)
Non-cash interest expense on liability related to the sale of future royalties	(5,912)	(5,064)	(11,601)	(9,883)
Interest and other income, net	1,382	1,044	2,105	2,185
Net loss	$ (40,780)	$ (32,113)	$ (80,185)	$ (61,479)
Net loss per share — basic and diluted	$ (0.68)	$ (0.56)	$ (1.35)	$ (1.09)
Weighted-average number of shares used in computing net loss per share — basic and diluted	59,605	57,648	59,438	56,242
Other comprehensive income:				
Unrealized (loss) gain on available-for-sale securities, net	(276)	155	658	261
Comprehensive loss	$ (41,056)	$ (31,958)	$ (79,527)	$ (61,218)

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

CYTOKINETICS, INCORPORATED
CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT)
(In thousands, except share data) (Unaudited)

	Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Income	Accumulated Deficit	Total Stockholders' Deficit
	Shares	Amount				
Balance, December 31, 2019	59,172,124	$ 59	$ 853,341	$ 679	$ (865,016)	$ (10,937)
Exercise of stock options	12,165	—	93	—	—	93
Vesting of restricted stock units, net of taxes withheld	274,563	—	(2,255)	—	—	(2,255)
Stock-based compensation	—	—	3,524	—	—	3,524
Claims settlement under Section 16(b)	—	—	2,151	—	—	2,151
Issuance of warrants	—	—	184	—	—	184
Other comprehensive income	—	—	—	934	—	934
Net loss	—	—	—	—	(39,405)	(39,405)
Balance, March 31, 2020	59,458,852	$ 59	$ 857,038	$ 1,613	$ (904,421)	$ (45,711)
Exercise of stock options	396,379	1	3,333	—	—	3,334
Stock-based compensation	—	—	4,527	—	—	4,527
Issuance of common stock under Employee Stock Purchase Plan	86,839	—	826	—	—	826
Other comprehensive loss	—	—	—	(276)	—	(276)
Net loss	—	—	—	—	(40,780)	(40,780)
Balance, June 30, 2020	59,942,070	$ 60	$ 865,724	$ 1,337	$ (945,201)	$ (78,080)

	Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Income	Accumulated Deficit	Total Stockholders' Equity (Deficit)
	Shares	Amount				
Balance, December 31, 2018	54,717,906	$ 55	$ 768,703	$ 500	$ (743,324)	$ 25,934
Exercise of stock options	5,116	—	31	—	—	31
Vesting of restricted stock units, net of taxes withheld	165,347	—	(732)	—	—	(732)
Stock-based compensation	—	—	2,282	—	—	2,282
Issuance of common stock under at-the-market offering, net of issuance costs	562,811	—	5,117	—	—	5,117
Other comprehensive income	—	—	—	106	—	106
Net loss	—	—	—	—	(29,366)	(29,366)
Balance, March 31, 2019	55,451,180	$ 55	$ 775,401	$ 606	$ (772,690)	$ 3,372
Exercise of stock options	62,356	—	441	—	—	441
Stock-based compensation	—	—	2,819	—	—	2,819
Issuance of common stock under at-the-market offering, net of issuance costs	2,449,984	3	19,694	—	—	19,697
Issuance of common stock under Employee Stock Purchase Plan	92,975	—	548	—	—	548
Issuance of warrants	—	—	185	—	—	185
Other comprehensive income	—	—	—	155	—	155
Net loss	—	—	—	—	(32,113)	(32,113)
Balance, June 30, 2019	58,056,495	$ 58	$ 799,088	$ 761	$ (804,803)	$ (4,896)

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

CYTOKINETICS, INCORPORATED
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands) (Unaudited)

	Six Months Ended	
	June 30, 2020	June 30, 2019
Cash flows from operating activities:		
Net loss	$ (80,185)	$ (61,479)
Adjustments to reconcile net loss to net cash used in operating activities:		
Non-cash interest expense on liability related to sale of future royalties	11,638	9,883
Non-cash stock-based compensation expense	8,051	5,101
Depreciation and amortization of property and equipment	824	566
Interest receivable and amortization on investments	27	(1,208)
Non-cash interest expense related to debt	3,301	516
Changes in operating assets and liabilities:		
Accounts receivable	2,909	(6,762)
Contract assets	—	3,979
Prepaid and other assets	(160)	(266)
Operating lease right-of-use assets	2,058	1,733
Accounts payable	(5,240)	1,430
Accrued and other liabilities	1,454	(3,223)
Operating lease liabilities	(2,251)	(1,854)
Net cash used in operating activities	(57,574)	(51,584)
Cash flows from investing activities:		
Purchases of investments	(27,866)	(100,161)
Maturities of investments	107,897	114,149
Sales of investments	—	3,196
Purchases of property and equipment	(1,905)	(307)
Net cash provided by investing activities	78,126	16,877
Cash flows from financing activities:		
Proceeds from stock based award activities, net	1,998	288
Claims settlement under Section 16(b)	2,151	—
Net proceeds from long-term debt, net of debt discount and issuance cost	—	1,710
Issuance of common stock under at-the-market offering, net of issuance costs	—	24,814
Net cash provided by financing activities	4,149	26,812
Net increase (decrease) in cash and cash equivalents	24,701	(7,895)
Cash and cash equivalents, beginning of period	36,433	42,256
Cash and cash equivalents, end of period	$ 61,134	$ 34,361
Non-cash investing and financing activities:		
Right-of-use assets recognized in exchange for lease obligations	1,106	10,687

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

CYTOKINETICS, INCORPORATED
NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

Note 1 — Organization and Significant Accounting Policies

Cytokinetics, Incorporated (the "Company", "we" or "our") was incorporated under the laws of the state of Delaware on August 5, 1997. The Company is a late stage biopharmaceutical company focused on the discovery and development of novel small molecule therapeutics that modulate muscle function for the potential treatment of serious diseases and medical conditions.

Our financial statements contemplate the conduct of our operations in the normal course of business. We have incurred an accumulated deficit of $945.2 million since inception and there can be no assurance that we will attain profitability. The Company anticipates that it will have operating losses and net cash outflows in future periods.

We are subject to risks common to late stage biopharmaceutical companies including, but not limited to, development of new drug candidates, dependence on key personnel, and the ability to obtain additional capital as needed to fund our future plans. Our liquidity will be impaired if sufficient additional capital is not available on terms acceptable to us. To date, we have funded operations primarily through sales of our common stock, contract payments under our collaboration agreements, sale of future royalties, debt financing arrangements and issuances, government grants and interest income. Until we achieve profitable operations, we intend to continue to fund operations through payments from strategic collaborations, additional sales of equity and debt securities, grants and debt financings. We have never generated revenues from commercial sales of our drugs and may not have drugs to market for at least several years, if ever. Our success is dependent on our ability to enter into new strategic collaborations and/or raise additional capital and to successfully develop and market one or more of our drug candidates. As a result, we may choose to raise additional capital through equity or debt financings to continue to fund operations in the future. We cannot be certain that sufficient funds will be available from such a financing or through a collaborator when required or on satisfactory terms. Additionally, there can be no assurance that our drug candidates will be accepted in the marketplace or that any future products can be developed or manufactured at an acceptable cost. These factors could have a material adverse effect on our future financial results, financial position and cash flows.

Based on the current status of our research and development activities, we believe that our existing cash, cash equivalents and investments will be sufficient to fund cash requirements for at least the next 12 months from the filing date of this Quarterly Report on Form 10-Q. If, at any time, our prospects for financing research and development programs decline, we may decide to reduce research and development expenses by delaying, discontinuing or reducing funding of one or more of our research or development programs. Alternatively, we might raise funds through strategic collaborations, public or private financings or other arrangements. Such funding, if needed, may not be available on favorable terms, or at all. These financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis of Presentation

Our condensed consolidated financial statements include the accounts of Cytokinetics and our wholly-owned subsidiary. The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with generally accepted accounting principles in the United States of America ("GAAP") for interim financial information and the instructions to Form 10-Q and Rule 10-01 of Regulation S-X. The financial statements include all adjustments (consisting only of normal recurring adjustments) that management believes are necessary for the fair statement of our financial information. These interim results are not necessarily indicative of results to be expected for the full fiscal year or any future interim period. The balance sheet as of December 31, 2019 has been derived from the audited financial statements at that date, but does not include all of the information and footnotes required by GAAP for complete financial statements. The financial statements and related disclosures have been prepared with the presumption that users of the interim financial statements have read or have access to the audited financial statements for the preceding fiscal year. Accordingly, these financial statements should be read in conjunction with the audited financial statements and notes thereto contained in the Company's Form 10-K for the year ended December 31, 2019, as filed with the Securities and Exchange Commission.

Use of Estimates

The preparation of condensed consolidated financial statements in conformity with GAAP requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the condensed consolidated financial statements and reported amounts of revenues and expenses during the reporting periods. We evaluate our estimates on an ongoing basis. We base our estimates on our historical experience and also on assumptions that we believe are reasonable; however, actual results could significantly differ from those estimates.

Recent Accounting Pronouncements

In June 2016, the Financial Accounting Standards Board ("FASB") issued ASU 2016-13, *'Financial Instruments — Credit Losses — Measurement of Credit Losses on Financial Instruments* ("ASU 2016-13"), which requires that financial assets measured at amortized cost be presented at the net amount expected to be collected. The measurement of expected credit losses is based on historical experience, current conditions, and reasonable and supportable forecasts that affect collectability. ASU 2016-13 also eliminates the concept of "other-than-temporary" impairment when evaluating available-for-sale debt securities and instead focuses on determining whether any impairment is a result of a credit loss or other factors. An entity will recognize an allowance for credit losses on available-for-sale debt securities rather than an other-than-temporary impairment that reduces the cost basis of the investment. ASU 2016-13 is effective for annual and interim reporting periods beginning after December 15, 2019. We adopted ASU 2016-13 as of January 1, 2020 and the adoption did not have a material impact on the Condensed Consolidated Financial Statements.

In November 2018, the FASB issued ASU 2018-18, *Collaborative Arrangements (Topic 808): Clarifying the Interaction between Topic 808 and Topic 606* ("ASU 2018-18"), which makes targeted improvements to clarify the interaction between Topic 808, *Collaborative Arrangements*, and Topic 606, *Revenue from Contracts with Customers*. ASU 2018-18 is effective for fiscal years beginning after December 15, 2019, and interim periods within those fiscal years. We adopted ASU 2018-18 on January 1, 2020 and the adoption did not have a material impact on the Condensed Consolidated Financial Statements.

In March 2020, the FASB issued ASU 2020-04, *Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting* ("ASU 2020-04'). ASU 2020-04 provides optional guidance for a limited period of time to ease the potential burden associated with the expected market transition from the London Inter-Bank Offer Rate ("LIBOR") to alternative reference rates. Companies can apply ASU 2020-04 immediately, however the guidance will only be available until December 31, 2022. The Company's term loan utilizes LIBOR as the reference rate and the Company is currently evaluating the impact that adopting this new accounting standard will have on our Condensed Consolidated Financial Statements and related disclosures.

Note 2 — Net Loss Per Share

We excluded the following from diluted net loss per share because inclusion would have been antidilutive (in thousands):

	June 30, 2020	June 30, 2019
Options to purchase common stock	8,868	7,693
Warrants to purchase common stock	187	165
Restricted stock and performance units	1,130	876
Shares issuable related to the ESPP	8	31
Shares issuable upon conversion of convertible notes	16,675	—
Total shares	$ 26,868	8,765

Note 3 — Research and Development Arrangements

Amgen Inc. ("Amgen")

We and Amgen continue activities related to novel small molecule therapeutics, including omecamtiv mecarbil, that activate cardiac muscle contractility for potential applications in the treatment of heart failure under the collaboration and option agreement between the Company and Amgen dated December 29, 2006, as amended (the "Amgen Agreement").

Under the Amgen Agreement, we are eligible to receive over $300.0 million in additional development milestone payments based on various clinical milestones, including the initiation of certain clinical studies, the submission of an application for marketing authorization for a drug candidate to certain regulatory authorities and the receipt of such approvals. Additionally, we are eligible to receive up to $300.0 million in commercial milestone payments provided certain sales targets are met. Due to the nature of drug development, including the inherent risk of development and approval of drug candidates by regulatory authorities, we cannot estimate if and when these milestone payments could be achieved or become due and, accordingly, we consider the milestone payments to be constrained and exclude the milestone payments from the transaction price.

In 2018, we paid Amgen $18.8 million and completed the exercise of our option under the Amgen Agreement to co-invest $40.0 million in the Phase 3 development program of omecamtiv mecarbil in exchange for a total incremental royalty from Amgen of up to 4% on increasing worldwide sales of omecamtiv mecarbil outside Japan (the "Co-Invest Option").

We recognize research and development revenue for reimbursements from Amgen of both internal costs of certain full-time employee equivalents and other costs related to the Amgen Agreement. Research and development revenue from Amgen of $2.1 million and $2.8 million for the three months ended June 30, 2020 and 2019, respectively, and $4.4 million and $6.9 million for the six months ended June 30, 2020 and 2019, respectively, consists of reimbursement of costs we incurred related to METEORIC-HF (**M**ulticenter **E**xercise **T**olerance **E**valuation of **O**mecamtiv Mecarbil **R**elated to **I**ncreased **C**ontractility in **H**eart **F**ailure), a Phase 3 clinical trial intended to evaluate the potential of omecamtiv mecarbil to increase exercise performance.

We had accounts receivable of $2.1 million from Amgen as of June 30, 2020 and $3.3 million as of December 31, 2019.

Astellas Pharma Inc. ("Astellas")

We and Astellas entered into that certain License and Collaboration Agreement, dated June 21, 2013 (as subsequently amended and restated, the "Astellas Agreement") focused on the research, development, and commercialization of skeletal muscle activators.

In 2014, we and Astellas amended and restated the Astellas Agreement and expanded the objective of the collaboration to include spinal muscular atrophy ("SMA") and potentially other neuromuscular indications for reldesemtiv and other fast skeletal muscle troponin activators ("FSTAs").

In 2016, we and Astellas amended the Astellas Agreement (the "2016 Astellas Amendment") to expand the collaboration to include the development of reldesemtiv for the potential treatment of amyotrophic lateral sclerosis ("ALS"), as well as the possible development in ALS of other FSTAs previously licensed by us to Astellas, and Astellas paid us a $35.0 million non-refundable upfront amendment fee and an accelerated $15.0 million milestone payment for the initiation of the first Phase 2 clinical trial of reldesemtiv in ALS that was otherwise provided for in the Astellas Agreement, as if such milestone had been achieved upon the execution of the 2016 Astellas Amendment, and committed research and development consideration of $44.2 million, for total consideration of $94.2 million.

On April 23, 2020, we and Astellas entered into the two agreements referenced below which, taken together, amend and restate the Company's research, development and commercialization collaboration with Astellas under the Astellas Agreement.

Fast Skeletal Regulatory Activator Agreement

The Company and Astellas entered into that certain Fast Skeletal Regulatory Activator Agreement, dated April 23, 2020 (the "Astellas FSRA Agreement"). As a result of the Astellas FSRA Agreement, the Company will now have exclusive control and responsibility for the Company's future development and commercialization of reldesemtiv, CK-601 and other fast skeletal regulatory activator (collectively "FSRA") compounds and products, and accordingly, Astellas has agreed to terminate its license to all FSRA compounds and related products.

Under the Astellas FSRA Agreement, Astellas has agreed to pay one-third of the out-of-pocket clinical development costs which may be incurred in connection with the Company's potential Phase 3 clinical trial of reldesemtiv in ALS, up to a maximum contribution by Astellas of $12 million. In addition, Astellas has agreed to non-cash contributions to the Company, which include the transfer of its existing inventories of active pharmaceutical ingredient of reldesemtiv and CK-601. Astellas has also agreed to the continued conduct of ongoing stability studies pertaining to such existing inventories of active pharmaceutical ingredient, at Astellas' cost. In exchange, the Company will pay Astellas a low- to mid- single digit royalty on sales of reldesemtiv in the United States, Canada, United Kingdom and the European Union until the later of (i) ten years following the first commercial sale of such product in a major market country, or (ii) December 31, 2034, subject to certain royalty reduction provisions. The Company would not owe Astellas royalties on sales of reldesemtiv in any other country, or on the sale of any FSRA compounds or related products other than reldesemtiv.

License and Collaboration Agreement for Other Skeletal Sarcomere Activators

The Company and Astellas also entered into that certain License and Collaboration Agreement for Other Skeletal Sarcomere Activators, dated April 23, 2020 (the "Astellas OSSA Agreement"), which is an amendment and restatement of the Astellas Agreement and removes the FSRA compounds and related products from the collaboration.

Under the Astellas OSSA Agreement, additional research and early and late state development milestone payments for research and clinical milestones, including the initiation of certain clinical studies, the submission of an application for marketing authorization for a drug candidate to certain regulatory authorities and the commercial launch of collaboration products could total up to $250.0 million, except under certain scenarios. Additionally, $200.0 million in commercial milestones could be received under the Astellas OSSA Agreement provided certain sales targets are met. We are eligible to receive $1.0 million in research milestone

payments under the collaboration for each future potential drug candidate. Due to the nature of drug development, including the inherent risk of development and approval of drug candidates by regulatory authorities, it is not possible to estimate if and when these milestone payments could be achieved or become due.

We continue to recognize research revenue for reimbursements from Astellas of internal costs of certain full-time employee equivalents, supporting collaborative research and development programs, and of other costs related to those programs. Research and development revenue from Astellas was $1.2 million and $4.4 million for the three months ended June 30, 2020 and 2019 respectively, and $2.7 million and $8.7 million for the six months ended June 30, 2020 and 2019.

We had an immaterial accounts receivable balance from Astellas as of June 30, 2020 and $1.9 million as of December 31, 2019.

Note 4 — Fair Value Measurements

We value our financial assets and liabilities at fair value, defined as the price that would be received for assets when sold or paid to transfer a liability in an orderly transaction between market participants at the measurement date (exit price). We utilize market data or assumptions that we believe market participants would use in pricing the asset or liability, including assumptions about risk and the risks inherent in the inputs to the valuation technique. These inputs can be readily observable, market corroborated or generally unobservable.

We primarily apply the market approach for recurring fair value measurements and endeavor to utilize the best information reasonably available. Accordingly, we use valuation techniques that maximize the use of observable inputs and minimize the use of unobservable inputs to the extent possible, and consider the security issuers' and the third-party issuers' credit risk in our assessment of fair value.

We classify fair value based on the observability of those inputs using a hierarchy that prioritizes the inputs used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurement) and the lowest priority to unobservable inputs (Level 3 measurement):

Level 1 — Observable inputs, such as quoted prices in active markets for identical assets or liabilities;

Level 2 — Inputs, other than the quoted prices in active markets, that are observable either directly or through corroboration with observable market data; and

Level 3 — Unobservable inputs, for which there is little or no market data for the assets or liabilities, such as internally-developed valuation models.

Fair value of financial assets:

The follow tables set forth the fair value of our financial assets, which consists of cash equivalents and investments classified as available-for-sale securities, that were measured on a recurring basis (in thousands):

		June 30, 2020			
	Fair Value Hierarchy Level	**Amortized Cost**	**Unrealized Gains**	**Unrealized Losses**	**Fair Value**
Money market funds	Level 1	$ 61,119	$ —	$ —	$ 61,119
U.S. Treasury securities	Level 1	100,690	608	—	101,298
Agency bonds	Level 2	13,805	20	—	13,825
Commercial paper	Level 2	3,000	—	—	3,000
Corporate obligations	Level 2	32,355	136	—	32,491
		$ 210,969	$ 764	$ —	$ 211,733

	Fair Value Hierarchy Level	December 31, 2019			
		Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
Money market funds	Level 1	$ 31,535	$ —	$ —	$ 31,535
U.S. Treasury securities	Level 1	134,845	72	(1)	134,916
Agency bonds	Level 2	47,024	23	(9)	47,038
Commercial paper	Level 2	10,435	4	—	10,439
Corporate obligations	Level 2	40,426	24	(7)	40,443
		$ 264,265	$ 123	$ (17)	$ 264,371

Interest income, net was $1.4 million and $1.0 million for three months ended June 30, 2020 and 2019, respectively, and $2.1 million and $2.2 million for the six months ended June 30, 2020 and 2019, respectively.

Investments available for sale as of June 30, 2020 and December 31, 2019 exclude an investment in equity classified as a Level 1 investment in our short-term investments with a fair value of $1.3 million and $1.0 million, respectively. For the three months ended June 30, 2020 and 2019, we recognized an unrealized gain of $0.7 million and an immaterial unrealized loss, respectively, for this Level 1 investment. For the six months ended June 30, 2020 and 2019,we recognized an unrealized gain of $0.3 million and an immaterial unrealized gain, respectively, for this Level 1 investment. As of June 30, 2020, unrealized losses were not due to changes in credit risk and we believe investments with an unrealized loss would be held until maturity.

No credit losses on debt securities were recorded during the three and six months ended June 30, 2020 and 2019. In its evaluation to determine expected credit losses, management considered all available historical and current information, expectations of future economic conditions, the type of security, the credit rating of the security, and the size of the loss position, as well as other relevant information. The Company does not intend to sell, and is unlikely to be required to sell, any of these available-for-sale investments before their effective maturity or market price recovery.

The carrying amount of our accounts receivable and accounts payable approximates fair value due to the short-term nature of these instruments.

Fair value of financial liabilities:

As of June 30, 2020, the fair value of our term loan approximated its carrying value of $45.6 million, because it is carried at a market observable interest rate, which is a Level 2 input (see Note 7 – “Debt”).

As of June 30, 2020, the estimated fair value of our convertible notes was $373.2 million and was based upon observable, Level 2 inputs, including pricing information from recent trades of the convertible notes (see Note 7 – “Debt”).

As of June 30, 2020, the fair value of the liability related to the sale of future royalties is $154.9 million and is based on our current estimates of future royalties expected to be paid to RPI Finance Trust, an entity related to Royalty Pharma, over the life of the arrangement, which are considered Level 3 inputs (See Note 8 – “Liability Related to Sale of Future Royalties”).

There were no transfers between Level 1, Level 2, and Level 3 during the periods presented.

Note 5 — Balance Sheet Components

Accrued liabilities were as follows (in thousands):

	June 30, 2020	December 31, 2019
Accrued liabilities:		
Clinical and preclinical costs	$ 3,655	$ 2,215
Compensation related	7,476	8,343
Other accrued expenses	2,557	1,565
Total accrued liabilities	$ 13,688	$ 12,123

Note 6 — Leases

The lease for our existing facilities expires in 2021 and includes rental payments on a graduated scale and payment of certain operating expenses. As of June 30, 2020, the remaining lease term is 1.0 years and the discount rate used to determine the operating lease liability was 9.0%.

In July 2019, we amended the lease agreement in connection with our leasing of additional premises within the same office location (the "Expansion Lease") for 9,530 square feet of an office space. The Expansion Lease has an initial term of 39 months, and commenced in January 2020. As of June 30, 2020, the remaining lease term of the Expansion Lease is 2.8 years and the discount rate used to determine the operating lease liability was 11.5% .

In July 2019, we entered into a lease agreement for approximately 234,892 square feet of office and laboratory space at a facility located in South San Francisco, California (the "Oyster Point Lease"). The lease has an initial term of twelve years and may commence in the fourth quarter of 2021. We have two consecutive five-year options to extend the lease. Subject to rent abatement for the first two months of the lease, we will be required to pay $5.45 per square foot for 159,891 square feet for the first twelve months of the lease term, which will increase at a rate of 3.5% per year. After the first twelve months of the lease, rent will be payable on the entire leased square footage. A refundable security deposit of $5.1 million is also required as part of the lease. We paid fifty percent of the security deposit amount on December 31, 2019 and the remaining fifty percent is due in January 2021. The landlord will provide a tenant improvement allowance of $35.3 million for costs relating to the initial design and construction of the improvements. We will pay certain operating costs of the facility and have certain rights to sublease under the agreement. The total commitment of undiscounted lease payments for the Oyster Point lease was $217.7 million as of June 30, 2020.

The Company has not recognized a right-of-use asset or aggregate lease liability as of June 30, 2020 for the Oyster Point Lease as the underlying assets were unavailable for use by the Company at any time in the period ended June 30, 2020.

The undiscounted future non-cancellable lease payments under all of our lease agreements as of June 30, 2020 is as follows (in thousands):

Years ending December 31:		
2020 remainder	$	2,662
2021		4,616
2022		12,694
2023		16,195
2024		16,648
Thereafter		170,919
Total undiscounted future lease payments		223,734
Less: Undiscounted lease payments related to Oyster Point Lease		(217,667)
Less: Present value adjustments		(401)
Total lease liability	$	5,666

Cash paid for amounts included in the measurement of lease liabilities for the six months ended June 30, 2020 and 2019 was $3.6 million and $2.3 million, respectively, and was included in net cash used in operating activities in our condensed consolidated statements of cash flows.

Rent expense was $1.4 million and $1.3 million for the three months ended June 30, 2020 and 2019, respectively, and $2.8 million and $2.5 million for the six months ended June 30, 2020 and 2019, respectively.

Note 7 — Debt

Term Loan

Prior to May 17, 2019 we maintained a loan and security agreement dated as of October 19, 2015, as amended (the "Original Loan Agreement") with Oxford Finance LLC ("Oxford") and Silicon Valley Bank ("SVB") (Oxford and SVB, collectively the "Lenders") to fund our working capital and other general corporate needs.

Subsequently, we and the Lenders entered into that certain Loan and Security Agreement, dated May 17, 2019, as amended, (the "Term Loan Agreement") pursuant to which the Lenders made available to us a $45.0 million loan (the "Term Loan"). The proceeds of the Term Loan were used in part to repay in full all amounts outstanding under the Original Loan Agreement, an aggregate principal amount of $42.0 million.

The Term Loan was accounted for as a debt modification in a non-troubled debt restructuring, rather than a debt extinguishment, based on a comparison of the present value of the cash flows under the terms of the debt immediately before and after the effective date of the Term Loan, which resulted in a change of less than 10%. As a result, issuance costs paid to the Lenders in connection with the Term Loan were recorded as a reduction of the carrying amount of the debt liability and were not significant. Unamortized issuance costs as of the date of the modification were amortized to interest expense over the repayment term of Term Loan.

Both borrowings under the Original Loan Agreement and Term Loan Agreement bear interest at an annual rate equal to the greater of (a) 8.05% or (b) the sum of 6.81% plus the 30-day U.S. LIBOR rate. The borrowing under the Original Loan Agreement was repayable in monthly interest-only payments through November 2019 followed by 35 months of monthly payments of interest and principal. The borrowing under the Term Loan Agreement was initially repayable in monthly interest-only payments through December 31, 2020. The interest-only period was automatically extended until July 1, 2021 as a result of the Company's initiation of a Phase 2 trial for CK-274 in cardiomyopathy and could potentially be extended through December 31, 2021 if positive results are achieved in the Phase 3 GALACTIC-HF trial for omecamtiv mecarbil in chronic heart failure, in form and content reasonably acceptable to the Lenders. The ultimate interest-only period will be followed by equal monthly payments of principal and interest to the maturity date in December 2023. We are required to make a final payment upon loan maturity of 6.00% of the notes payable, which we accrete over the life of the Term Loan. Our obligations under the Term Loan Agreement are secured by substantially all our current and future assets, other than our intellectual property.

Interest expense for the Term Loan was $1.2 million and $1.4 million for the three months ended June 30, 2020 and 2019, respectively, and $2.5 million and $2.5 million for the six months ended June 30, 2020 and 2019, respectively. As of June 30, 2020, the interest rate applicable to borrowings under the Term Loan was 8.05%.

The Term Loan Agreement contains customary representations and warranties and customary affirmative and negative covenants applicable to us and includes customary events of default, including but not limited to the nonpayment of principal or interest, violations of covenants and material adverse changes. Upon an event of default, the Lenders may, among other things, accelerate the loans and foreclose on the collateral. Our obligations under the Term Loan Agreement are secured by substantially all our current and future assets, other than our intellectual property. If the Term Loan becomes subject to mandatory prepayment under these provisions, we are subject to certain prepayment premiums of 3.00% in the first year, 2.00% in the second year and 1.00% in the third year and thereafter. We determined that these contingent prepayment provisions were an embedded component that qualified as a derivative which should be bifurcated from the Term Loan and accounted for separately from the host contract. As of June 30, 2020, the fair value of this embedded derivative was immaterial.

Future minimum payments under the Term Loan Agreement are (in thousands):

Years ending December 31:	
2020 remainder	$ 1,841
2021	12,519
2022	20,264
2023	23,381
Future minimum payments	58,005
Less: Interest and final payment	(13,005)
Term Loan, gross	$ 45,000

Convertible Notes

On November 13, 2019, the Company issued $138.0 million aggregate principal amount of 2026 Notes. The 2026 Notes are unsecured obligations and bear interest at an annual rate of 4.0% per year, payable semi-annually on May 15 and December 15 of each year, beginning May 15, 2020. The 2026 Notes are governed by an indenture between the Company and U.S. Bank National Association, as trustee. The 2026 Notes will mature on November 15, 2026, unless earlier repurchased or redeemed by the Company or converted at the option of the holders. The Company may redeem the 2026 Notes prior to the maturity date but is not required to and no sinking fund is provided for the 2026 Notes. The 2026 Notes may be converted, under certain circumstances as described below, based on an initial conversion rate of 94.7811 shares of common stock per $1,000 principal amount (which represents an initial conversion price of $10.55 per share). The conversion rate for the 2026 Notes will be subject to adjustment upon the occurrence of

certain specified events. In addition, upon the occurrence of a make-whole fundamental change (as defined in the indenture), the Company will, in certain circumstances, increase the conversion rate by a number of additional shares for a holder that elects to convert its notes in connection with such make-whole fundamental change. The Company received approximately $133.9 million in net proceeds, after deducting the initial purchasers' discount, from the issuance of the 2026 Notes.

The 2026 Notes may be converted at the option of the holder under any of the following circumstances: (1) during any calendar quarter commencing after the calendar quarter ending on March 31, 2020 (and only during such calendar quarter), if the last reported sale price of the Company's common stock for at least 20 trading days (whether or not consecutive) during a period of 30 consecutive trading days ending on, and including, the last trading day of the immediately preceding calendar quarter exceeds 127.5% of the last reported sale price of the Company's common stock on November 7, 2019; (2) during the 5 consecutive business days immediately after any 10 consecutive trading day period (such 10 consecutive trading day period, the "measurement period") if the trading price per $1,000 principal amount of 2026 Notes for each trading day of the measurement period was less than 98% of the product of the last reported sale price per share of the Company's common stock on such trading day and the conversion rate on such trading day; (3) upon the occurrence of certain corporate events or distributions on the Company's common stock; (4) if the Company calls the 2026 Notes for redemption; and (5) at any time from, and including, July 15, 2026 until the close of business on the scheduled trading day immediately before the maturity date, November 15, 2026. The Company will settle conversions by paying or delivering, as applicable, cash, shares of the Company's common stock, or a combination of cash and shares of the Company's common stock, at the Company's election, based on the applicable conversion rate.

The 2026 Notes will be redeemable, in whole or in part, at the Company's option at any time, and from time to time, on or after November 20, 2023 and, in the case of any partial redemption, on or before the 60th scheduled trading day before the maturity date, at a cash redemption price equal to the principal amount of the 2026 Notes to be redeemed, plus accrued and unpaid interest, if any, to, but excluding, the redemption date but only if the last reported sale price per share of the Company's common stock exceeds 130% of the conversion price on (1) each of at least 20 trading days, whether or not consecutive, during the 30 consecutive trading days ending on, and including, the trading day immediately before the date the Company sends the related redemption notice; and (2) the trading day immediately before the date the Company sends such notice. If a "fundamental change" (as defined in the indenture) occurs, then, subject to certain exceptions, holders may require the Company to repurchase their 2026 Notes at a cash repurchase price equal to the principal amount of the 2026 Notes to be repurchased, plus accrued and unpaid interest, if any, to, but excluding, the fundamental change repurchase date.

In accounting for the issuance of the 2026 Notes, the Company separated the 2026 Notes into liability and equity components. The carrying amount of the liability component of approximately $84.2 million was calculated by using a discount rate of 12.0%, which was estimated to be the Company's borrowing rate on the date of the issuance of the notes for a similar debt instrument without the conversion feature. The carrying amount of the equity component of approximately $49.5 million, representing the conversion option, was determined by deducting the fair value of the liability component from the par value of the 2026 Notes. The equity component of the 2026 Notes is included in additional paid-in capital in the consolidated balance sheets and is not remeasured as long as it continues to meet the conditions for equity classification. The difference between the principal amount of the 2026 Notes and the liability component (the "debt discount") is amortized to interest expense using the effective interest method over the term of the 2026 Notes.

Debt issuance costs for the issuance of the 2026 Notes were approximately $5.0 million, consisting of initial purchasers' discount and other issuance costs. In accounting for the transaction costs, the Company allocated the total amount incurred to the liability and equity components using the same proportions as the proceeds from the 2026 Notes. Transaction costs attributable to the liability component were approximately $3.1 million, were recorded as debt issuance cost (presented as contra debt in the consolidated balance sheet) and are being amortized to interest expense over the term of the 2026 Notes. The transaction costs attributable to the equity component were approximately $1.9 million and were netted with the equity component in stockholders' equity. As of June 30, 2020, the unamortized debt issuance cost for the 2026 Notes was $3.0 million on the consolidated balance sheet.

The following table presents the total amount of interest cost recognized relating to the 2026 Notes (in thousands):

	Three Months Ended June 30, 2020	Six Months Ended June 30, 2020
Contractual interest expense	$ 1,380	$ 2,760
Amortization of debt discount	1,276	2,513
Amortization of debt issuance costs	12	25
Total interest costs recognized	$ 2,668	$ 5,298

The effective interest rate on the liability component of the 2026 Notes was 12.5% for the year ended June 30, 2020, which remains unchanged from the date of issuance. The remaining unamortized debt discount was $48.3 million as of June 30, 2020, and will be amortized over approximately 6.5 years. The if-converted value of the 2026 Notes exceeded its principal amount by $255.0 million as of June 30, 2020.

Capped Call Transactions

In connection with the offering of the 2026 Notes, the Company entered into privately-negotiated capped call transactions with one of the underwriters in the offering or its affiliate. The Company used approximately $13.4 million of the net proceeds from the offering of the 2026 Notes to pay the cost of the capped call transactions. The capped call transactions are expected generally to reduce potential dilution to the Company's common stock upon any conversion of the 2026 Notes and/or offset any cash payments the Company is required to make in excess of the principal amount of converted 2026 Notes, as the case may be, in the event that the market value per share of the Company's common stock, as measured under the terms of the capped call transactions at the time of exercise, is greater than the strike price of the capped call transactions (which initially corresponds to the initial conversion price of the 2026 Notes, and is subject to certain adjustments), with such reduction and/or offset subject to a cap initially equal to approximately $14.07 (which represents a premium of approximately 70% over the last reported sale price of the Company's common stock on November 7, 2019), subject to certain adjustments. The capped call transactions are separate transactions, entered into by the Company and are not part of the terms of the 2026 Notes.

Given that the transactions meet certain accounting criteria, the convertible note capped call transactions are recorded in stockholders' equity, and they are not accounted for as derivatives and are not remeasured each reporting period. As of June 30, 2020, the Company had not purchased any shares under the convertible note capped call transactions.

Note 8 — Liability Related to Sale of Future Royalties

In February 2017, we entered into a royalty purchase agreement (the "RPI Agreement") with RPI Finance Trust ("RPI") under which we sold a portion of our right to receive royalties on potential net sales of omecamtiv mecarbil (and potentially other compounds with the same mechanism of action) under the Amgen Agreement to RPI for a payment of $90.0 million, which is non-refundable even if omecamtiv mecarbil is never commercialized (the "RPI Royalty Monetization"). Under the Amgen Agreement, we are entitled to tiered royalties of 16.0% - 26.0% related to worldwide sales (excluding Japan) of omecamtiv mecarbil. Under the RPI Agreement, RPI is entitled to receive a royalty on omecamtiv mecarbil sales (and potentially other compounds with the same mechanism of action) that would have otherwise been payable to the Company from Amgen during the period from its commercialization to 2035. The royalty rate payable to RPI is dependent upon the commercialization date of omecamtiv mecarbil with the rate starting at 4.5% if omecamtiv mecarbil is commercialized prior to July 1, 2022 and increasing thereafter up to 5.5%. Concurrently, we entered into a common stock purchase agreement with RPI through which RPI purchased 875,656 shares of the Company's common stock for $10.0 million. We allocated the consideration and issuance costs on a relative fair value basis to the Liability related to the sale of future royalties (the "RPI Liability") and the common stock, which resulted in the RPI Liability being initially recognized at $92.3 million.

We account for the RPI Royalty Monetization as a liability primarily because we have significant continuing involvement in generating the royalty stream under the Amgen Agreement. If and when omecamtiv mecarbil is commercialized and royalties become payable under the Amgen Agreement, we will recognize the portion of royalties paid to RPI from Amgen as non-cash revenue with a corresponding decrease to the RPI Liability.

In order to amortize the RPI Liability, we estimate the future royalties to be paid by Amgen to RPI over the life of the arrangement. The excess of future estimated royalty payments over the $92.3 million of allocated proceeds, less issuance costs, is recognized as non-cash interest expense using the effective interest method. Consequently, we estimate an imputed rate of interest on the unamortized portion of the RPI Liability, which was approximately 17% as of June 30, 2020 and December 31, 2019.

We periodically assess the amount and timing of expected royalty payments using a combination of internal projections and forecasts from external sources. To the extent such payments are greater or less than our initial estimates or the timing of such payments is materially different than its original estimates, we will prospectively adjust the amortization of the RPI Liability and the effective interest rate.

There are a number of factors that could materially affect the amount and timing of royalty payments from Amgen, most of which are not within our control. The RPI Liability is recognized using significant unobservable inputs. These inputs are derived using internal management estimates developed based on third party data, including data from Amgen who has primary commercialization responsibilities, and reflect management's judgements, current market conditions surrounding competing products, and forecasts. The significant unobservable inputs include the estimated patient population, estimated selling price, estimated peak sales and sales ramp,

the expected term of the royalty stream, timing of the expected launch and its impact on the royalty rate as well as the overall probability of a successful Phase 3 trial. A significant change in unobservable inputs could result in a material increase or decrease to the effective interest rate of the RPI Liability. During 2019 and through the first six months of 2020, there were no material changes to the significant unobservable inputs used to recognize the RPI Liability.

Changes to the RPI Liability related to the sale of future royalties are as follows (in thousands):

	2020	2019
Beginning balance, January 1	$ 143,276	$ 122,473
Interest accretion	5,689	4,819
Amortization of issuance costs	18	16
Ending balance, March 31	148,983	127,308
Interest accretion	5,912	5,064
Amortization of issuance costs	19	16
Ending balance, June 30	$ 154,914	$ 132,388

We recognized $5.9 million and $5.1 million in non-cash interest expense for the three months ended June 30, 2020 and 2019, respectively, and $11.6 million and $9.9 million for the six months ended June 30, 2020 and 2019, respectively, related to the RPI Agreement.

Note 9 — Stockholders' Equity

Equity Incentive Plan

In May 2019, the Company's stockholders approved an amendment to the Amended and Restated 2004 Equity Incentive Plan (the "2004 Plan") to increase the number of authorized shares reserved for issuance under the 2004 Plan by 4.1 million shares. In May 2020, the Company's board of directors approved an amendment to the 2004 Plan to increase the number of authorized shares reserved for issuance under the 2004 Plan by 0.8 million shares for inducement grants to potential new employees. As of June 30, 2020, 2.8 million authorized shares were available for grant under the 2004 Plan.

Employee Stock Purchase Plan

In May 2020, the Company's stockholders approved an amendment to the 2015 Employee Stock Purchase Plan (the "ESPP") to increase the number of common stock shares reserved for issuance under the ESPP by 0.5 million shares. As of June 30, 2020, 0.5 million shares of common stock reserved for issuance under the ESPP.

Warrants

During the first quarter of 2020, in connection with the Term Loan Agreement further described in Note 7, we issued a warrant with an exercise price of $10.42 per share to purchase 21,595 shares of our common stock. The warrant was issued in connection with achieving the interest-only extension milestone 1 in the Term Loan Agreement. The warrant was fully exercisable and expires in January 2030. The $0.2 million fair value of the warrant related to the Term Loan was recorded as interest expense in the period. As of June 30, 2020, we had outstanding warrants issued pursuant to the Original Loan Agreement and Term Loan Agreement with a weighted average exercise price of $7.62 per share to purchase 187,019 shares of our common stock.

Claims settlement

In the first quarter of 2020, we received $2.2 million from a claims settlement with certain institutional investors that were beneficial owners of our common stock related to the disgorgement of short swing profits pursuant to Section 16(b) of the Securities Exchange Act of 1934, as amended.

Note 10 – Subsequent Events

RTW Transactions

On July 14, 2020, we entered into a series of transactions as described below with RTW Royalty Holdings Designated Activity Company ("RTW Royalty Holdings"), an entity affiliated with certain investment funds managed by RTW Investments, LP, ("RTW") and Ji Xing Pharmaceuticals Limited ("Ji Xing") related to Cytokinetics' proprietary small molecule cardiac myosin inhibitor product referred to as CK-274 and other assets (together, the "RTW Transactions"). Pursuant to the RTW Transactions, we expect to receive a combination of committed capital, funding and sale proceeds from RTW and Ji Xing and we are eligible to receive up to $200.0 million in milestone payments plus royalties on future sales of CK-274 and other clinical indications that may be associated with excessive cardiac muscle contractility in the greater China region, including mainland China, Hong Kong, Macau and Taiwan.

License and Collaboration Agreement

On July 14, 2020, we entered into a License and Collaboration Agreement (the "Ji Xing License Agreement") with Ji Xing, pursuant to which we granted to Ji Xing an exclusive license to develop and commercialize CK-274 in the greater China region. Under the terms of the Ji Xing License Agreement, we received from Ji Xing an upfront payment of $25.0 million. We may be eligible to receive from Ji Xing milestone payments totaling up to $200.0 million for the achievement of certain development and commercial milestone events in connection to CK-274 in the field of obstructive hypertrophic cardiomyopathy ("oHCM") and/or non-obstructive hypertrophic cardiomyopathy ("nHCM") and other indications. In addition, Ji Xing will pay us tiered royalties in the low-to-high teens range on the net sales of CK-274 in the greater China region, subject to certain reductions for generic competition, patent expiration and payments for licenses to third party patents. The Ji Xing License Agreement, unless terminated earlier, will continue on a market-by-market basis until expiration of the relevant royalty term.

Funding Agreement

On July 14, 2020, we entered into a Funding Agreement (the "Funding Agreement") with RTW Royalty Holdings. Pursuant to the Funding Agreement, RTW Royalty Holdings has committed to provide up to $90.0 million (the "Funding Commitment"), to fund our development and commercialization of CK-274 in nHCM and oHCM. Half of the Funding Commitment will be available, at our option, if certain clinical trial milestones of CK-274 for oHCM are achieved by January 14, 2023, and the other $45.0 million of the Funding Commitment will be available, at our option, if certain clinical trial milestones of CK-274 for nHCM are achieved by January 14, 2024. If we develop CK-274 in another indication, we will negotiate an additional funding commitment from RTW to fund our development and commercialization of CK-274 in such other indication (other than oHCM or nHCM).

In exchange for the Funding Commitment and upon receipt of such funding from RTW Royalty Holdings, we have agreed to make payments to RTW Royalty Holdings equal to 2%, if RTW Royalty Holdings funds $45.0 million of the Funding Commitment, or 4%, if RTW Royalty Holdings funds the full $90.0 million of the Funding Commitment, in each case in respect of net sales of CK-274 by us and any of our licensees in the United States, the European Union, Switzerland, the United Kingdom and certain other countries in Europe (collectively referred to as the "CK-274 Territory"). In addition, should we exercise our option pursuant to the Funding Agreement, such agreement contains certain covenants applicable to us, including, among other things, development and commercialization diligence obligations in connection to the CK-274 Territory, use of proceeds, reporting and encumbrances.

The Funding Agreement contains customary conditions to disbursement, which may include the consent of our senior secured lenders at the time of disbursement. On July 16, 2020, we entered into an amendment to the Term Loan Agreement, which permits, subject to entry into an intercreditor agreement between Oxford and RTW in form and substance reasonably satisfactory to the Lenders and RTW, the draw of funding under the Funding Agreement and the grant of a security interest to RTW in the intellectual property located in the United States and accounts receivable related to CK-274 thereunder.

Royalty Purchase Agreement

On July 14, 2020, we entered into a Royalty Purchase Agreement (the "Royalty Purchase Agreement") with RTW Royalty Holdings, pursuant to which we will sell our right to receive certain payments on the net sales of products containing the compound *mavacamten*, a cardiac myosin inhibitor (the "Mavacamten Royalty"), under the Research Collaboration Agreement, dated August 24, 2012, between us and MyoKardia, Inc. ("MyoKardia") (as amended, the "Collaboration Agreement"), to RTW Royalty Holdings for a one-time payment of $85.0 million. The purchase price will be paid to us at closing, which is expected to occur on or before October 12, 2020 or such later date as may be agreed by the parties. The closing of the transaction contemplated by the Royalty Purchase Agreement is subject to customary closing conditions, including the parties' obtaining the consent of MyoKardia to the sale of the Mavacamten Royalty to RTW Royalty Holdings, as well as obtaining the consent of the Lenders. On July 16, 2020, the Lenders granted their consent to the consummation of the sale and purchase transaction under the Royalty Purchase Agreement.

Common Stock Purchase Agreements

On July 14, 2020, we entered into Common Stock Purchase Agreements (collectively the "CSPAs"), with each of RTW Master Fund, Ltd., RTW Innovation Master Fund, Ltd. and RTW Venture Fund Limited (collectively the "RTW Investors"). Pursuant to the CSPAs, we issued and sold an aggregate of 2,000,000 shares of our common stock at a price per share of $25.00 and an aggregate purchase price of $50.0 million. Such shares are subject to certain trading and other restrictions.

Public Offering of Common Stock

On July 21, 2020, we closed an underwritten public offering of 8,385,417 shares of our common stock at a public offering price of $24.00 which included the exercise in full by the underwriters of their option to purchase up to 1,093,750 shares of our common stock at the same price. The gross proceeds were $201.3 million and net proceeds were approximately $189 million, after deducting underwriting discounts, commissions and offering costs.

Warrants

On July 16, 2020, OTA LLC, as assignee of Oxford, exercised 51,214 warrants with a strike price of $6.59 per share, 48,892 warrants with a strike price of $6.903 per share, and 25,352 warrants with a strike price of $7.10 per share and elected the cashless settlement method. Accordingly, on July 21, 2020, we issued to OTA LLC a total of 95,932 shares of our common stock.

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

This discussion and analysis should be read in conjunction with our financial statements and accompanying notes included elsewhere in this report. Operating results are not necessarily indicative of results that may occur in future periods.

This report contains forward-looking statements indicating expectations about future performance and other forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and the Private Securities Litigation Reform Act of 1995, that involve risks and uncertainties. We intend that such statements be protected by the safe harbor created thereby. Forward-looking statements involve risks and uncertainties and our actual results and the timing of events may differ significantly from the results discussed in the forward-looking statements. Examples of such forward-looking statements include, but are not limited to, statements about or relating to:

- guidance concerning revenues, research and development expenses and general and administrative expenses for 2020;
- the sufficiency of existing resources to fund our operations for at least the next 12 months;
- our capital requirements and needs for additional financing;
- our ability to exercise an option to receive up to $90.0 million in cash under the Funding Agreement;
- the initiation, design, conduct, enrollment, progress, timing and scope of clinical trials and development activities for our drug candidates conducted by ourselves or our partners, Amgen, Astellas and Ji Xing, including the anticipated timing for initiation of clinical trials, anticipated rates of enrollment for clinical trials and anticipated timing of results becoming available or being announced from clinical trials;
- the results from the clinical trials, the non-clinical studies and chemistry, manufacturing, and controls activities of our drug candidates and other compounds, and the significance and utility of such results;
- anticipated interactions with regulatory authorities;
- our and our partners' plans or ability to conduct the continued research and development of our drug candidates and other compounds;
- the advancement of omecamtiv mecarbil in Phase 3 clinical development or the timing of any results from such Phase 3 clinical trial;
- our expected roles in research, development or commercialization under our strategic alliances with Amgen and Astellas and Ji Xing;
- the properties and potential benefits of, and the potential market opportunities for, our drug candidates and other compounds, including the potential indications for which they may be developed;
- the sufficiency of the clinical trials conducted with our drug candidates to demonstrate that they are safe and efficacious;
- our receipt of milestone payments, royalties, reimbursements and other funds from current or future partners under strategic alliances, such as with Amgen, Astellas or Ji Xing;
- our ability to continue to identify additional potential drug candidates that may be suitable for clinical development;
- market acceptance of our drugs;
- changes in third party healthcare coverage and reimbursement policies;
- our plans or ability to commercialize drugs, with or without a partner, including our intention to develop sales and marketing capabilities;
- the focus, scope and size of our research and development activities and programs;
- the utility of our focus on the biology of muscle function, and our ability to leverage our experience in muscle contractility to other muscle functions;
- our ability to protect our intellectual property and to avoid infringing the intellectual property rights of others;
- future payments and other obligations under loan, lease agreements, and revenue interest agreement and the convertible notes;

- potential competitors and competitive products;
- retaining key personnel and recruiting additional key personnel;
- the potential impact of recent accounting pronouncements on our financial position or results of operations; and
- the potential impact of the COVID-19 pandemic on our research and development activities and business operations, including the availability of financing.

Such forward-looking statements involve risks and uncertainties, including, but not limited to:

- Amgen's decisions with respect to the timing, design and conduct of research and development activities for omecamtiv mecarbil and related compounds, including decisions to postpone or discontinue research or development activities relating to omecamtiv mecarbil and related compounds;
- Astellas' decisions with respect to the timing, design and conduct of research and development activities for those skeletal muscle activators subject to the Astellas OSSA Agreement;
- Ji Xing's decisions with respect to the timing, design and conduct of development and commercialization activities for CK-274 in the People's Republic of China (including the Hong Kong SAR and Macau SAR) (together "China") and Taiwan;
- our ability to consummate the transactions contemplated by the Royalty Purchase Agreement;
- our ability to receive funds under the Funding Agreement, which is subject to certain conditions;
- our ability to enter into strategic partnership agreements for any of our programs on acceptable terms and conditions or in accordance with our planned timelines;
- our ability to obtain additional financing on acceptable terms, if at all;
- our receipt of funds and access to other resources under our current or future strategic alliances, in the development, testing, manufacturing or commercialization of our drug candidates or slower than anticipated patient enrollment, in our or partners' clinical trials, or in the manufacture and supply of clinical trial materials;
- failure by our contract research organizations, contract manufacturing organizations and other vendors to properly fulfill their obligations or otherwise perform as expected;
- results from non-clinical studies that may adversely impact the timing or the further development of our drug candidates and other compounds;
- the possibility that the U.S. Food and Drug Administration (the "FDA") or foreign regulatory agencies may delay or limit our or our partners' ability to conduct clinical trials or may delay or withhold approvals for the manufacture or sale of our products;
- changing standards of care and the introduction of products by competitors or alternative therapies for the treatment of indications we target that may limit the commercial potential of our drug candidates;
- difficulties or delays in achieving market access, reimbursement and favorable drug pricing for our drug candidates and the potential impacts of health care reform;
- changes in laws and regulations applicable to drug development, commercialization or reimbursement;
- the uncertainty of protection for our intellectual property, whether in the form of patents, trade secrets or otherwise;
- potential infringement or misuse by us of the intellectual property rights of third parties;
- activities and decisions of, and market conditions affecting, current and future strategic partners;
- accrual information provided by and performance of our contract research organizations ("CROs"), contract manufacturing organizations ("CMOs"), and other vendors;
- potential ownership changes under Internal Revenue Code Section 382; and
- the timeliness and accuracy of information filed with the U.S. Securities and Exchange Commission (the "SEC") by third parties.

In addition, such statements are subject to the risks and uncertainties discussed in the "Risk Factors" section and elsewhere in this document and the documents incorporated herein by reference. Such statements speak only as of the date on which they are made, and, except as required by law, we undertake no obligation to update any forward-looking statement to reflect events or circumstances after the date on which the statement is made or to reflect the occurrence of unanticipated events. New factors emerge from time to time, and it is not possible for us to predict which factors will arise. In addition, we cannot assess the impact of each factor on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements.

Business

When used in this report, unless otherwise indicated, "Cytokinetics," "Company," "we," "our" and "us" refers to Cytokinetics, Incorporated. CYTOKINETICS, and our logo used alone and with the mark CYTOKINETICS, are registered service marks and trademarks of Cytokinetics. Other service marks, trademarks and trade names referred to in this report are the property of their respective owners.

Overview

We are a late-stage biopharmaceutical company focused on discovering, developing and commercializing first-in-class muscle activators and next-in-class muscle inhibitors as potential treatments for debilitating diseases in which muscle performance is compromised and/or declining. We have discovered and are developing muscle-directed investigational medicines that may potentially improve the health span of people with devastating cardiovascular and neuromuscular diseases of impaired muscle function. Our research and development activities relating to the biology of muscle function have evolved from our knowledge and expertise regarding the cytoskeleton, a complex biological infrastructure that plays a fundamental role within every human cell. As a leader in muscle biology and the mechanics of muscle performance, we are developing small molecule drug candidates specifically engineered to impact muscle function and contractility.

Our clinical-stage drug candidates are: omecamtiv mecarbil, a novel cardiac myosin activator, AMG 594, a novel cardiac troponin activator, reldesemtiv, a novel fast skeletal muscle troponin activator ("FSTA") and CK-3773274 ("CK-274"), a novel cardiac myosin inhibitor.

Omecamtiv mecarbil is being evaluated for the potential treatment of heart failure under a strategic alliance with Amgen to discover, develop, and commercialize novel small molecule therapeutics designed to activate cardiac muscle contractility pursuant to the collaboration and option agreement dated December 29, 2006, as amended (the "Amgen Agreement"). Amgen, in collaboration with Cytokinetics, is conducting GALACTIC-HF (**G**lobal **A**pproach to **L**owering **A**dverse **C**ardiac Outcomes **T**hrough **I**mproving **C**ontractility in **H**eart Failure), a Phase 3 cardiovascular outcomes clinical trial of omecamtiv mecarbil in heart failure. In collaboration with Amgen, we are conducting METEORIC-HF (**M**ulticenter **E**xercise **T**olerance **E**valuation of **O**mecamtiv Mecarbil **R**elated to **I**ncreased **C**ontractility in **H**eart **F**ailure), a second Phase 3 clinical trial intended to evaluate its potential to increase exercise performance.

AMG 594 was discovered under our joint research program with Amgen. In collaboration with Cytokinetics, Amgen conducted a randomized, placebo-controlled, double-blind, single and multiple ascending dose, single-center Phase 1 study to assess the safety and tolerability, pharmacokinetics and pharmacodynamics of AMG 594 in healthy subjects.

CK-274 is a novel, oral, small molecule cardiac myosin inhibitor that we discovered independent of our collaborations. CK-274 arose from an extensive chemical optimization program conducted with attention to therapeutic index and pharmacokinetic properties that may translate into next-in-class potential in clinical development. CK-274 was designed to reduce the hypercontractility that is associated with hypertrophic cardiomyopathy ("HCM"). In preclinical models, CK-274 reduces myocardial contractility by binding directly to cardiac myosin at a distinct and selective allosteric binding site, thereby preventing myosin from entering a force producing state. CK-274 reduces the number of active actin-myosin cross bridges during each cardiac cycle and consequently reduces myocardial contractility. This mechanism of action may be therapeutically effective in conditions characterized by excessive hypercontractility, such as HCM. We completed a Phase 1 study which met its primary and secondary objectives to assess the safety and tolerability of single and multiple oral doses of CK-274, describe the pharmacokinetics of CK-274 and its pharmacodynamic effects as measured by echocardiography, as well as to characterize the pharmacokinetics ("PK") and pharmacodynamic ("PD") relationship with regards to cardiac function. These data support the advancement of CK-274 into a Phase 2 clinical trial in patients with obstructive HCM which started in the first quarter of 2020. REDWOOD-HCM is a multicenter, randomized, placebo-controlled, double-blind, dose-finding clinical trial in patients with symptomatic, obstructive HCM.

Reldesemtiv selectively activates the fast skeletal muscle troponin complex in the sarcomere by increasing its sensitivity to calcium, leading to an increase in skeletal muscle contractility. Reldesemtiv was developed under our joint development program with Astellas under the License and Collaboration Agreement, dated June 21, 2013, as amended and restated (the "Astellas Agreement").

In collaboration with Astellas, we conducted a Phase 2 clinical trial of reldesemtiv in patients with spinal muscular atrophy ("SMA") and a Phase 2 clinical trial of reldesemtiv in patients with amyotrophic lateral sclerosis ("ALS"), called FORTITUDE-ALS (**F**unctional **O**utcomes in a **R**andomized **T**rial of **I**nvestigational **T**reatment with CK-2127107 to **U**nderstand **D**ecline in **E**ndpoints – in **ALS**). Astellas, in collaboration with us, conducted a Phase 2 clinical trial of reldesemtiv in patients with chronic obstructive pulmonary disease ("COPD") and a Phase 1b clinical trial of reldesemtiv in elderly subjects with limited mobility.

Our research continues to drive innovation and leadership in muscle biology. All of our drug candidates have arisen from our cytoskeletal research activities. Our focus on the biology of the cytoskeleton distinguishes us from other biopharmaceutical companies, and potentially positions us to discover and develop novel therapeutics that may be useful for the treatment of severe diseases and medical conditions. Each of our drug candidates has a novel mechanism of action compared to currently marketed drugs, which we believe validates our focus on the cytoskeleton as a productive area for drug discovery and development. We intend to leverage our experience in muscle contractility to expand our current pipeline and expect to identify additional potential drug candidates that may be suitable for clinical development.

Research and Development Programs

Our long-standing interest in the cytoskeleton has led us to focus our research and development activities on the biology of muscle function and, in particular, small molecule modulation of muscle contractility. We believe that our expertise in the modulation of muscle contractility is an important differentiator for us. Our preclinical and clinical experience in muscle contractility may position us to discover and develop additional novel therapies that have the potential to improve the health of patients with severe and debilitating diseases or medical conditions.

Small molecules that affect muscle contractility may have several applications for a variety of serious diseases and medical conditions. For example, heart failure is a disease often characterized by impaired cardiac muscle contractility which may be treated by modulating the contractility of cardiac muscle. Similarly, certain diseases and medical conditions associated with muscle weakness may be amenable to treatment by enhancing the contractility of skeletal muscle. Because the modulation of the contractility of different types of muscle, such as cardiac and skeletal muscle, may be relevant to multiple diseases or medical conditions, we believe we can leverage our expertise in these areas to more efficiently discover and develop potential drug candidates that modulate the applicable muscle type for multiple indications.

We segment our research and development activities related to muscle contractility by our cardiac muscle contractility program and our skeletal muscle contractility program. We also conduct research and development on novel treatments for disorders involving muscle function beyond muscle contractility.

Cardiac Muscle Program

Our cardiac muscle contractility program is focused on the cardiac sarcomere, the basic unit of muscle contraction in the heart. The cardiac sarcomere is a highly ordered cytoskeletal structure composed of cardiac myosin, actin and a set of regulatory proteins. Cardiac myosin is the cytoskeletal motor protein in the cardiac muscle cell. It is directly responsible for converting chemical energy into the mechanical force, resulting in cardiac muscle contraction. Our most advanced cardiac program is based on the hypothesis that activators of cardiac myosin may address certain adverse properties of existing positive inotropic agents. Current positive inotropic agents, such as beta-adrenergic receptor agonists or inhibitors of phosphodiesterase activity, increase the concentration of intracellular calcium, thereby increasing cardiac sarcomere contractility. The effect on calcium levels, however, also has been linked to potentially life-threatening side effects. In contrast, our novel cardiac myosin activators work by a mechanism that directly stimulates the activity of the cardiac myosin motor protein, without increasing the intracellular calcium concentration. They accelerate the rate-limiting step of the myosin enzymatic cycle and shift it in favor of the force-producing state. Rather than increasing the velocity of cardiac contraction, this mechanism instead lengthens the systolic ejection time, which results in increased cardiac function in a potentially more oxygen-efficient manner.

Our earlier stage cardiac program is based on the hypothesis that inhibitors of hyperdynamic contraction and obstruction of left ventricular blood flow may counteract the pathologic effects of mutations in the sarcomere that lead to hypertrophic cardiomyopathies. A targeted oral therapy addressing this disease etiology may improve symptoms, exercise capacity and potentially slow disease progression.

Amgen Strategic Alliance

Our strategic alliance with Amgen to discover, develop, and commercialize novel small molecule therapeutics designed to activate cardiac muscle, including omecamtiv mecarbil, for the potential treatment of heart failure is governed by the Amgen Agreement. Amgen has exclusive, worldwide rights to develop and commercialize omecamtiv mecarbil and related compounds

subject to our specified development and commercial participation rights. Amgen has also entered an alliance with Les Laboratoires Servier and Institut de Recherches Internationales Servier ("Servier") for exclusive commercialization rights for omecamtiv mecarbil in Europe as well as the Commonwealth of Independent States ("CIS"), including Russia; Servier contributes funding for development and provides strategic support to the program.

Under the Amgen Agreement we are eligible for potential additional pre-commercialization and commercialization milestone payments of over $600.0 million in the aggregate on omecamtiv mecarbil and other potential products arising from research under the collaboration, and royalties that escalate based on increasing levels of annual net sales of products commercialized under the agreement.

The Amgen Agreement provided for us to receive increased royalties by co-funding the Phase 3 development program for omecamtiv mecarbil and other drug candidates under the collaboration. We co-invested $40.0 million in the Phase 3 development program of omecamtiv mecarbil in exchange for a total incremental royalty from Amgen of up to 4% on increasing worldwide sales of omecamtiv mecarbil outside Japan and the right to co-promote omecamtiv mecarbil in institutional care settings in North America, with reimbursement by Amgen for certain sales force activities. A joint commercial operating team comprising representatives of Cytokinetics and Amgen will be responsible for the day-to-day management of the commercialization program of omecamtiv mecarbil.

Amgen generally has discretion to elect whether to pursue or abandon the development of omecamtiv mecarbil and may terminate our strategic alliance for any reason upon six months' prior notice. With our consent, Amgen granted Servier an option to commercialize omecamtiv mecarbil in Europe and the CIS, including Russia, which Servier decided to exercise. In August 2016, we entered into a letter agreement with Amgen and Servier, which provides that if Amgen's rights to omecamtiv mecarbil are terminated with respect to the territory subject to Servier's sublicense, the sublicensed rights previously granted by Amgen to Servier with respect to omecamtiv mecarbil, will remain in effect and become a direct license or sublicense of such rights by us to Servier, on substantially the same terms as those in the Option, License and Collaboration Agreement between Amgen and Servier.

Omecamtiv mecarbil

Our lead drug candidate from our cardiac contractility program is omecamtiv mecarbil, a novel cardiac myosin activator. We expect omecamtiv mecarbil to be developed as a potential treatment across the continuum of care in heart failure both for use in the hospital setting and for use in the outpatient setting. Omecamtiv mecarbil is the subject of a Phase 3 development program in patients with heart failure with reduced ejection fraction under our strategic alliance with Amgen.

Omecamtiv mecarbil: Clinical Development

GALACTIC-HF: GALACTIC-HF is a Phase 3 cardiovascular outcomes clinical trial of omecamtiv mecarbil which is being conducted by Amgen, in collaboration with Cytokinetics. The primary objective of this double-blind, randomized, placebo-controlled multicenter clinical trial is to determine if treatment with omecamtiv mecarbil when added to standard of care is superior to standard of care plus placebo in reducing the risk of cardiovascular death or heart failure events in patients with high risk chronic heart failure and reduced ejection fraction. GALACTIC-HF is being conducted under a Special Protocol Assessment ("SPA") with the FDA. GALACTIC-HF completed enrollment in mid-2019, having enrolled 8,256 symptomatic chronic heart failure patients with reduced ejection fraction in over 1,000 sites in 35 countries who were either currently hospitalized for a primary reason of heart failure or had had a hospitalization or admission to an emergency room for heart failure within one year prior to screening. Patients are randomized to either placebo or omecamtiv mecarbil with dose titration up to a maximum dose of 50 mg twice daily based on the plasma concentration of omecamtiv mecarbil after initiation of drug therapy. The primary endpoint is a composite of time to cardiovascular death or first heart failure event, whichever occurs first, with heart failure event defined as hospitalization, emergency room visit, or urgent unscheduled clinic visit for heart failure. Secondary endpoints include time to cardiovascular death; patient reported outcomes as measured by the Kansas City Cardiomyopathy Questionnaire Total Symptom Score; time to first heart failure hospitalization; and time to all-cause death.

In February 2020, we announced the publication of a manuscript relating to the design of GALACTIC-HF in the *Journal of American College of Cardiology: Heart Failure (JACC: HF)*.

In February 2020, we, Amgen and Servier announced that the Data Monitoring Committee ("DMC") for GALACTIC-HF recently completed the second and final planned interim analysis, which included consideration of pre-specified criteria for futility and superiority. The DMC reviewed data from GALACTIC-HF and recommended that GALACTIC-HF continue without changes to its conduct. The second interim analysis was triggered once a pre-specified number of cardiovascular deaths had occurred in GALACTIC-HF as stipulated by the trial's protocol. A futility analysis allowed the potential for stopping GALACTIC-HF early had the interim analysis shown a low likelihood of the trial demonstrating a clinically meaningful and statistically significant benefit on

the primary endpoint in patients receiving omecamtiv mecarbil, plus standard of care, compared to patients receiving placebo plus standard of care. A superiority analysis allowed the potential for stopping the trial early if the primary composite endpoint and the secondary endpoint (time to cardiovascular death) reached statistical significance, adjusting the statistical threshold for interim review. The DMC considers all available evidence in its recommendations regarding trial conduct, and the stopping boundaries provide guidance to the DMC but are not binding rules.

In March 2020, we announced that patient baseline characteristics and demographics from GALACTIC-HF were published during the Virtual American College of Cardiology 69th Annual Scientific Session together with the World Congress of Cardiology (ACC.20/WCC Virtual).

On May 8, 2020, we announced that the FDA has granted fast track designation for omecamtiv mecarbil for the potential treatment of chronic heart failure with reduced ejection fraction. Fast track designation may potentially expedite the review of a drug that is intended for the treatment of a serious or life-threatening disease or condition and demonstrates the potential to address an unmet medical need for such a disease or condition.

We expect top-line results for GALACTIC-HF in the fourth quarter of 2020.

METEORIC-HF: In collaboration with Amgen, we are conducting METEORIC-HF, a second Phase 3 clinical trial intended to evaluate its potential to increase exercise performance. Patients are being randomized in a 2:1 fashion to omecamtiv mecarbil, which is started at 25 mg twice daily and titrated to 25, 37.5 or 50 mg twice daily based on the same PK-guided dosing regimen as is used in GALACTIC-HF, or to placebo. METEORIC-HF is planned to enroll approximately 270 symptomatic chronic heart failure patients in nine countries. The primary endpoint of METEORIC-HF is change in peak oxygen uptake on Cardio-Pulmonary Exercise Testing (“CPET”) from baseline to Week 20. Secondary endpoints include change in total workload during CPET from baseline to Week 20, change in ventilatory efficiency during CPET from baseline to Week 20 and change in the average daily activity units measured over 2 weeks from baseline to Week 18-20. After temporarily suspending enrollment in METEORIC-HF due to the COVID-19 pandemic earlier this year, we resumed enrollment in June. We believe enrollment may be completed in early 2021.

AMG 594

AMG 594 is a novel, selective, oral, small molecule cardiac troponin activator which was discovered under our joint research program with Amgen. In preclinical models, AMG 594 increases myocardial contractility by binding to cardiac troponin through an allosteric mechanism that sensitizes the cardiac sarcomere to calcium, facilitating more actin-myosin cross bridge formation during each cardiac cycle thereby resulting in increased myocardial contractility. Similar to cardiac myosin activation, preclinical research has shown that cardiac troponin activation does not change the calcium transient of cardiac myocytes.

In March 2020, we announced that preclinical data were presented at the Keystone Symposium “Charting a New Course for Heart Failure: From Discovery to Data,” demonstrating that AMG 594 selectively increases calcium sensitivity of cardiac muscle fibers and increases cardiac contractility.

AMG 594: Clinical Development

In collaboration with Cytokinetics, Amgen conducted a randomized, placebo-controlled, double-blind, single and multiple ascending dose, single-center Phase 1 study to assess the safety and tolerability, pharmacokinetics and pharmacodynamics of AMG 594 in healthy subjects. The study design includes several single ascending dose cohorts and three multiple ascending dose cohorts, with eight healthy subjects per cohort. The Phase 1 study is now complete with data analysis ongoing. We are discussing with Amgen potential next steps in the development program for AMG 594.

CK-274

CK-274 is a novel, oral, small molecule cardiac myosin inhibitor that our company scientists discovered independent of our collaborations. CK-274 arose from an extensive chemical optimization program conducted with attention to therapeutic index and pharmacokinetic properties that may translate into next-in-class potential in clinical development. CK-274 was purposely designed to reduce the hypercontractility that is associated with HCM. In preclinical models, CK-274 reduces myocardial contractility by binding directly to cardiac myosin at a distinct and selective allosteric binding site, thereby preventing myosin from entering a force producing state. CK-274 reduces the number of active actin-myosin cross bridges during each cardiac cycle and consequently reduces myocardial contractility. This mechanism of action may be therapeutically effective in conditions characterized by excessive hypercontractility, such as HCM. The preclinical pharmacokinetics of CK-274 were characterized evaluated and optimized for potential rapid onset, ease of titration and rapid symptom relief in the clinical setting. The initial focus of the development program for CK-274 will include an extensive characterization of its PK/PD relationship as has been a hallmark of Cytokinetics’ industry-leading

development programs in muscle pharmacology. The overall development program will assess the potential of CK-274 to improve exercise capacity and relieve symptoms in patients with hyperdynamic ventricular contraction due to HCM.

In February 2020, we announced that preclinical data were presented at the Biophysical Society 64th Annual Meeting demonstrating that CK-274 has a distinct binding site on cardiac myosin, and selectively reduces cardiac myosin activity *in vitro*.

Ji Xing Strategic Alliance

On July 14, 2020, we entered into the Ji Xing License Agreement, pursuant to which we granted to Ji Xing an exclusive license to develop and commercialize CK-274 in the greater China region. Under the terms of the Ji Xing License Agreement, we received from Ji Xing an upfront payment of $25.0 million. We may be eligible to receive from Ji Xing milestone payments totaling up to $200.0 million for the achievement of certain development and commercial milestone events in connection to CK-274 in the field of obstructive hypertrophic cardiomyopathy, or oHCM, and/or non-obstructive hypertrophic cardiomyopathy, or nHCM, and other indications. In addition, Ji Xing will pay us tiered royalties in the low-to-high teens range on the net sales of CK-274 in the greater China region, subject to certain reductions for generic competition, patent expiration and payments for licenses to third party patents. The Ji Xing License Agreement, unless terminated earlier, will continue on a market-by-market basis until expiration of the relevant royalty term.

CK-274: Clinical Development

We conducted a Phase 1 double-blind, randomized, placebo-controlled, multi-part, single and multiple ascending dose clinical trial of CK-274 to assess the safety and tolerability, pharmacokinetics and pharmacodynamics of CK-274 in healthy subjects. In 2019 we presented data from the Phase 1 study of CK-274. The study met its primary and secondary objectives to assess the safety and tolerability of single and multiple oral doses of CK-274, describe the pharmacokinetics of CK-274 and its pharmacodynamic effects as measured by echocardiography, as well as to characterize the PK/PD relationship with regards to cardiac function. These data support the advancement of CK-274 into a Phase 2 clinical trial in patients with obstructive HCM. In 2019, we prepared for the start of REDWOOD-HCM (**R**andomized **E**valuation of **D**osing **W**ith CK-274 in **O**bstructive **O**utflow **D**isease in HCM), the Phase 2 clinical trial designed to determine the safety and tolerability of CK-274 in patients with symptomatic, obstructive HCM. REDWOOD-HCM started in the first quarter of 2020 and will continue through 2020. In response to the COVID-19 pandemic, we temporarily suspended enrollment in REDWOOD-HCM to protect the safety and health of clinical trial participants and healthcare professionals but have since resumed enrollment. We expect data from the first cohort of patients in REDWOOD-HCM, which will inform progression of the trial to the second cohort, to be available by the end of 2020.

CK-271

In the first quarter of 2020, we submitted an IND for CK-271, a second cardiac myosin inhibitor, and we were notified by the FDA that the IND was accepted. We plan to start a Phase 1 study of CK-271 in the third quarter of 2020. One of the hallmarks of Cytokinetics' research and development approach has been to advance multiple compounds to enable potential expansion of a drug development program into different indications and patient populations.

Skeletal Muscle Contractility Program

Our skeletal muscle contractility program is focused on the activation of the skeletal sarcomere, the basic unit of skeletal muscle contraction. The skeletal sarcomere is a highly ordered cytoskeletal structure composed of skeletal muscle myosin, actin, and a set of regulatory proteins, which include the troponins and tropomyosin. This program leverages our expertise developed in our ongoing discovery and development of cardiac sarcomere activators, including the cardiac myosin activator, omecamtiv mecarbil.

We believe that our skeletal sarcomere activators may lead to new therapeutic options for diseases and medical conditions associated with neuromuscular dysfunction and potentially also conditions associated with aging and muscle weakness and wasting. The clinical effects of muscle weakness and wasting, fatigue and loss of mobility can range from decreased quality of life to, in some instances, life-threatening complications. By directly improving skeletal muscle function, a small molecule activator of the skeletal sarcomere potentially could enhance functional performance and quality of life in patients suffering from diseases or medical conditions associated with skeletal muscle weakness or wasting, such as ALS, SMA, COPD or sarcopenia (general frailty associated with aging).

Astellas Strategic Alliance

Our strategic alliance with Astellas to advance novel therapies for diseases and medical conditions associated with muscle impairment and weakness commenced in 2013 under the original Astellas Agreement. Initially we exclusively licensed to Astellas rights to co-develop and potentially co-commercialize reldesemtiv and other FSTAs in non-neuromuscular indications and to develop

and commercialize other novel mechanism skeletal muscle activators in all indications, subject to certain Cytokinetics' development and commercialization rights. Subsequently, in 2014, we and Astellas expanded the strategic alliance to include certain neuromuscular indications, including SMA, for reldesemtiv and other FSTAs and to advance reldesemtiv into Phase 2 clinical development, initially in SMA. In 2016, we and Astellas further expanded the strategic alliance to include the development of reldesemtiv for the potential treatment of ALS, as well as the possible development in ALS of other FSTAs previously licensed by us to Astellas, and granted Astellas an option for a global collaboration for the development and commercialization of our first-generation FSTA, tirasemtiv (the "Option on Tirasemtiv").

On April 23, 2020, Cytokinetics and Astellas entered into two agreements, which, taken together, amend and restate our research, development and commercialization collaboration with Astellas under the Astellas Agreement, as set out below.

Cytokinetics and Astellas signed a Fast Skeletal Regulatory Activator Agreement dated April 23, 2020 (the "Astellas FSRA Agreement"). As a result of the FSRA Agreement, Cytokinetics will now have exclusive control and responsibility for Cytokinetics' future development and commercialization of reldesemtiv, CK-601 and other fast skeletal regulatory activator (collectively "FSRA") compounds and products, and accordingly, Astellas has agreed to terminate its license to all FSRA compounds and related products. Under the Astellas FSRA Agreement, Astellas has agreed to pay one-third of the out-of-pocket clinical development costs which may be incurred in connection with Cytokinetics' potential Phase 3 clinical trial of reldesemtiv in ALS up to a maximum contribution by Astellas of $12 million. In addition, Astellas has agreed to non-cash contributions to Cytokinetics, which include the transfer of its existing inventories of active pharmaceutical ingredient of reldesemtiv and CK-601. Astellas has also agreed to the continued conduct of ongoing stability studies pertaining to such existing inventories of active pharmaceutical ingredient, at Astellas' cost. In exchange, Cytokinetics will pay Astellas a low- to mid- single digit royalty on sales of reldesemtiv in the United States, Canada, United Kingdom and the European Union until the later of (i) ten years following the first commercial sale of such product in a major market country, or (ii) December 31, 2034, subject to certain royalty reduction provisions. Cytokinetics would not owe Astellas royalties on sales of reldesemtiv in any other country, or on the sale of any FSRA compounds or related products other than reldesemtiv.

Cytokinetics and Astellas also signed a License and Collaboration Agreement for Other Skeletal Sarcomere Activators, dated April 23, 2020 (the "Astellas OSSA Agreement"). The Astellas OSSA Agreement is an amendment and restatement of the Astellas Agreement and removes the FSRA compounds and related products from the collaboration.

Under the Astellas OSSA Agreement, Astellas has extended the joint research program at Cytokinetics focused on the discovery of additional next-generation skeletal muscle activators (other than FSRAs) through December 31, 2020, with a minimum of fifteen (15) research FTE's being supported by Astellas.

In addition, under the Astellas OSSA Agreement, Astellas has exclusive rights to co-develop and commercialize skeletal sarcomere activators (other than FSRA compounds and products) in all indications, subject to certain development and commercialization rights of Cytokinetics; Cytokinetics may co-promote and conduct certain commercial activities in the U.S., Canada and/or Europe under agreed scenarios. Astellas will be responsible for the costs associated with the development of all collaboration products under the Astellas OSSA Agreement, subject to Cytokinetics' option to co-fund certain development costs as described below. Cytokinetics retains an option to conduct early-stage development for certain agreed indications at its initial expense, subject to reimbursement if development continues under the collaboration. Astellas will reimburse Cytokinetics for certain expenses associated with its co-promotion activities. The Astellas OSSA Agreement also provides for Cytokinetics to lead certain activities relating to the commercialization of collaboration products for neuromuscular indications in the U.S., Canada and Europe under particular scenarios. The research term may be extended beyond December 31, 2020 by mutual consent.

If development candidates are identified and advance in clinical research, the Astellas OSSA Agreement contains provisions related to shared development roles between Cytokinetics and Astellas, and opportunities for Cytokinetics to co-invest and/or co-promote under certain conditions. In the case of molecules taken forward solely by Astellas, Cytokinetics would receive development and regulatory milestones of $25 to $35 million per product, up to $250 million for all products, except under certain scenarios, commercial milestones of up to $200 million, and royalties that range from a mid-single digit level to low double-digits. In the event of co-investment by Cytokinetics and approvals in certain indications, Cytokinetics would receive royalties ranging from mid-to-high double digits (not to exceed an incremental rate in the mid-twenties).

Astellas may terminate the Astellas OSSA Agreement as to any particular product or territory, or in its entirety, upon 180 days advance written notice following expiration of the research term.

Reldesemtiv

Reldesemtiv selectively activates the fast skeletal muscle troponin complex in the sarcomere by increasing its sensitivity to calcium, leading to an increase in skeletal muscle contractility. Reldesemtiv has demonstrated pharmacological activity in preclinical models and evidence of potentially clinically relevant pharmacodynamic effects in humans. The FDA granted reldesemtiv orphan drug designation for the potential treatment of SMA in 2017 and for the potential treatment of ALS in 2019. The European Medicines Agency ("EMA") granted orphan medicinal product designation to reldesemtiv for the potential treatment of SMA in 2019 and for the potential treatment of ALS in March 2020.

Reldesemtiv: Clinical Development

SMA: In 2018, we announced data from a hypothesis-generating, Phase 2 double-blind, randomized, placebo-controlled clinical study in patients with SMA which was designed to determine potential pharmacodynamic effects of a suspension formulation of reldesemtiv following 8 weeks of oral dosing in each of two cohorts of 36 patients with Type II, Type III, or Type IV disease. Secondary objectives were to evaluate the safety, tolerability and pharmacokinetics of reldesemtiv. The study showed statistically significant concentration-dependent increases in changes from baseline in Six Minute Walk Distance ("6MWD"), a sub-maximal exercise test of aerobic capacity and endurance. The study also showed statistically significant increases for Maximal Expiratory Pressure ("MEP"), a measure of strength of respiratory muscles. Other assessments, including the Hammersmith Functional Motor Score – Extended, Revised Upper Limb Module, Timed Up-and-Go, Forced Vital Capacity, and the SMA Health Index ("SMA-HI"), a patient reported outcome measure ("PROM") developed to comply with FDA standards for PROMs, did not demonstrate differences between reldesemtiv versus placebo. Adverse events were similar between groups receiving reldesemtiv and placebo.

Additional results presented in 2018 showed sustained increases in 6MWD and MEP four weeks after discontinuation of study drug (i.e., follow-up). A post-hoc analysis also showed that changes from baseline in the 6MWD at 450 mg twice daily were significantly correlated with changes from baseline on certain domains of the SMA-HI intended to reflect improved endurance, especially Fatigue and Activity Participation. Decreases in SMA-HI scores reflect reduced disease burden as measured by that PROM, suggesting that as 6MWD increased, disease burden assessed by that domain of the SMA-HI was reduced.

In 2019, we announced that we received feedback from the FDA that the 6MWD is an acceptable primary efficacy endpoint for a potential registration program for reldesemtiv in patients with SMA who have maintained ambulatory function. The FDA also recommended adding a global function scale as a secondary endpoint.

In 2019, we announced that data from two preclinical studies of reldesemtiv showed that the addition of reldesemtiv to treatment with SMN upregulators (nusinersen and SMN-C1, an analogue to risdiplam) significantly increased muscle force in a mouse model of SMA.

ALS: In collaboration with Astellas, we conducted FORTITUDE-ALS. This trial enrolled 458 eligible ALS patients who were randomized (1:1:1:1) to receive either 150 mg, 300 mg or 450 mg of reldesemtiv or placebo dosed orally twice daily for 12 weeks. The primary efficacy endpoint of FORTITUDE-ALS was the change from baseline in the percent predicted slow vital capacity ("SVC") at 12 weeks. Secondary endpoints included slope of the change from baseline in the mega-score of muscle strength measured by hand held dynamometry and handgrip dynamometry in patients on reldesemtiv; change from baseline in the ALS Functional Rating Scale – Revised ("ALSFRS-R"); incidence and severity of treatment-emergent adverse events; and plasma concentrations of reldesemtiv at the sampled time points during the study. Exploratory endpoints measured included the effect of reldesemtiv versus placebo on self-assessments of respiratory function made at home by the patient with help as needed by the caregiver; disease progression through quantitative measurement of speech production characteristics over time; disease progression through quantitative measurement of handwriting abilities over time; and the change from baseline in quality of life (as measured by the ALS Assessment Questionnaire-5) in patients on reldesemtiv.

In 2019, we announced that results of FORTITUDE-ALS. FORTITUDE-ALS did not achieve statistical significance for a pre-specified dose-response relationship in its primary endpoint of change from baseline in SVC after 12 weeks of dosing (p=0.11). Similar analyses of ALSFRS-R and slope of the Muscle Strength Mega-Score yielded p-values of 0.09 and 0.31, respectively. However, patients on all dose groups of reldesemtiv declined numerically less than patients on placebo for SVC and ALSFRS-R, with larger differences emerging over time.

While the dose-response analyses for the primary and secondary endpoints did not achieve statistical significance at the level of 0.05, in a post-hoc analysis pooling the doses together, patients who received reldesemtiv in FORTITUDE-ALS declined less than patients who received placebo. The trial showed numerical effects favoring reldesemtiv across dose levels and timepoints with clinically meaningful magnitudes of effect observed at 12 weeks for the primary and secondary endpoints. The differences between reldesemtiv and placebo in SVC and ALSFRS-R total score observed after 12 weeks of treatment were still evident at follow-up, four weeks after the last dose of study drug.

The incidence of early treatment discontinuations, serious adverse events and clinical adverse events in FORTITUDE-ALS were similar between placebo and active treatment arms. The most common clinical adverse effects in the trial included fatigue, nausea and headache. The leading cause for early termination from FORTITUDE-ALS for patients who received placebo was progressive disease; the leading cause for early termination for patients who received reldesemtiv was a decline in cystatin C based estimated glomerular filtration rate ("eGFR"), a measure of renal function. Elevations in transaminases and declines in cystatin C eGFR were dose-related.

In 2019, post-hoc analyses from FORTITUDE-ALS were presented. The analyses demonstrated that, in the combined middle and faster progressing tertiles of patients, the decline in the ALSFRS-R total score from baseline to week 12 in patients who received any dose of reldesemtiv was significantly smaller than the decline on placebo, while no significant difference between reldesemtiv and placebo was observed in slower progressing patients.

In 2019, we presented subgroup analyses of FORTITUDE-ALS, the Phase 2 clinical trial of reldesemtiv in patients with ALS, showing that the effect of reldesemtiv on patients with ALS was similar whether or not patients were also receiving edaravone and/or riluzole.

In the fourth quarter of 2019 and the first half of 2020, we convened regulatory interactions and conducted feasibility and other planning activities in preparation for the potential advancement of reldesemtiv to a Phase 3 trial in patients in ALS.

CK-601

In October 2018, we announced the advancement of CK-601, a next-generation FSTA, into Investigational New Drug ("IND")-enabling studies, which triggered a $2.0 million milestone payment from Astellas to us. CK-601 was designed in a joint research program conducted by the companies' scientists to have different pharmacokinetics and physicochemical properties than reldesemtiv which may inform its development for the treatment of diseases and conditions associated with both neuromuscular and non-neuromuscular etiology and pathogenesis. We expect to continue IND-enabling studies for CK-601 in 2020.

Ongoing Research in Skeletal Muscle Activators

Currently our research on the direct activation of skeletal muscle continues in two areas. We are conducting translational research in preclinical models of disease and muscle function with FSTAs to explore the potential clinical applications of this novel mechanism in diseases or conditions associated with skeletal muscle dysfunction. We also are conducting preclinical research on other chemically and pharmacologically distinct mechanisms to activate the skeletal sarcomere, which we have agreed to be the focus for our continued joint research program with Astellas, which was extended through 2020.

Beyond Muscle Contractility

We developed preclinical expertise in the mechanics of skeletal, cardiac and smooth muscle that extends from proteins to tissues to intact animal models. Our translational research in muscle contractility has enabled us to better understand the potential impact of small molecule compounds that increase skeletal or cardiac muscle contractility and to apply those findings to the further evaluation of our drug candidates in clinical populations. In addition to contractility, other major functions of muscle play a role in certain diseases that could benefit from novel mechanism treatments. Accordingly, our knowledge of muscle contractility may serve as an entry point to the discovery of novel treatments for disorders involving muscle functions other than muscle contractility. We are leveraging our current understandings of muscle biology to investigate new ways of modulating these other aspects of muscle function for other potential therapeutic applications.

COVID-19 Business Update

We are continuing to closely monitor the impact of the global COVID-19 pandemic on our business and are taking proactive efforts designed to protect the health and safety of our employees, patients, study investigators and clinical research staff, and to maintain business continuity. We believe that the measures we are implementing are appropriate and are helping to reduce the transmission of COVID-19, and we will continue to monitor and seek to comply with guidance from governmental authorities and adjust our activities as appropriate.

Based on guidance issued by federal, state and local authorities, we transitioned to a remote work model for a vast majority of our employees effective March 16, 2020, while maintaining certain essential in-person laboratory functions in order to advance key research and development initiatives, supported by the implementation of updated onsite procedures. We have since implemented a voluntary return to work for our employees subject to precautionary measures such as mandatory temperature checks for those employees that do work on site from time to time.

In the conduct of our business activities, we are also taking actions designed to protect the safety of patients and healthcare professionals. For patients already enrolled in our clinical trials, we and our partners are working closely with study investigators and clinical trial site staff to continue treatment in compliance with trial protocols and to uphold trial integrity, while working to observe government and institutional guidelines designed to safeguard the health and safety of patients and site staff.

After temporarily suspending enrollment in METEORIC-HF and REDWOOD-HCM due to the COVID-19 pandemic earlier this year, we have since resumed enrollment in both trials. In respect of METEORIC-HF, we believe enrollment may be completed in early 2021. We expect data from the first cohort of patients in REDWOOD-HCM, which will inform progression of the trial to the second cohort, to be available by the end of 2020.

While the potential economic impact brought by, and the duration of, the COVID-19 pandemic may be difficult to assess or predict, the pandemic could result in significant and prolonged disruption of global financial markets, reducing our ability to access capital, which could in the future negatively affect our liquidity. In addition, a recession or market correction resulting from the spread of COVID-19 could materially affect our business and the value of our common stock.

While we expect the COVID-19 pandemic to continue to affect our business operations, the extent of the impact on our clinical development and regulatory efforts and the value of and market for our common stock will depend on future developments that are highly uncertain and cannot be predicted with confidence at this time, such as the ultimate duration of the pandemic, travel restrictions, quarantines, social distancing and business closure requirements in the U.S. and in other countries, and the effectiveness of actions taken globally to contain and treat COVID-19. For additional information about risks and uncertainties related to the COVID-19 pandemic that may impact our business, our financial condition and our results of operations, see the section titled “Risk Factors” under Part II, Item 1A in this Quarterly Report on Form 10-Q.

Critical Accounting Policies and Significant Estimates

The accounting policies that we consider to be our most critical (i.e., those that are most important to the portrayal of our financial condition and results of operations and that require our most difficult, subjective or complex judgments), the effects of those accounting policies applied and the judgments made in their application are summarized in *“Item 7 — Management’s Discussion and Analysis of Financial Condition and Results of Operations — Critical Accounting Policies and Significant Estimates”* in our Annual Report on Form 10-K for the fiscal year ended December 31, 2019.

Our discussion and analysis of our financial condition and results of operations are based on our financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities and expenses and related disclosure of contingent assets and liabilities. We review our estimates on an ongoing basis. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances. Actual results may differ from these estimates under different assumptions or conditions.

Recent Accounting Pronouncements

See Note 1, “Recent Accounting Pronouncements” in the Notes to Unaudited Condensed Consolidated Financial Statements for a discussion of recently adopted accounting pronouncements and accounting pronouncements not yet adopted, and their expected impact on our financial position and results of operations.

Results of Operations

Revenues

Revenue for the three months ended June 30, 2020 and 2019 was $3.6 million and $7.1 million, respectively, and primarily consisted of research and development revenue from our collaborations with Amgen of $2.1 million and $2.8 million, respectively, and Astellas of $1.2 million and $4.4 million, respectively.

Revenues for the six months ended June 30, 2020 and 2019 was $7.4 million and $15.6 million, respectively, and primarily consisted of research and development revenue from our collaborations with Amgen of $4.4 million and $6.9 million, respectively, and Astellas of $2.7 million and $8.7 million, respectively.

Research and Development Expenses

Research and development expenses for the three and six months ended June 30, 2020 and 2019, were as follows (in thousands):

	Three Months Ended			Six Months Ended		
	June 30, 2020	June 30, 2019	Increase (Decrease)	June 30, 2020	June 30, 2019	Increase (Decrease)
Cardiac muscle contractility	$ 12,773	$ 11,350	$ 1,423	$ 24,881	$ 22,823	$ 2,058
Skeletal muscle contractility	2,443	6,834	(4,391)	5,062	13,782	(8,720)
All other research programs	6,574	5,833	741	13,585	10,957	2,628
Total research and development expenses	$21,790	$24,017	$(2,227)	$43,528	$47,562	$(4,034)

Research and development expenses for the three and six months ended June 30, 2020 decreased by $2.2 million and $4.0 million, respectively, from the three and six months ended June 30, 2019, primarily due to reduced spending for reldesemtiv which was completed in 2019 offset by clinical activities for our cardiac myosin inhibitor program.

We may continue to develop reldesemtiv to treat ALS and SMA. Under the Astellas FSRA Agreement, Astellas has agreed to pay one-third of the out-of-pocket clinical development costs which may be incurred in connection with Cytokinetics' potential Phase 3 clinical trial of reldesemtiv in ALS up to a maximum contribution by Astellas of $12 million. In addition, Astellas has agreed to non-cash contributions to Cytokinetics, which include the transfer of its existing inventories of active pharmaceutical ingredient of reldesemtiv and CK-601. Astellas has also agreed to the continued conduct of ongoing stability studies pertaining to such existing inventories of active pharmaceutical ingredient, at its cost. Under our strategic alliance with Amgen, we expect to continue the Phase 3 development of omecamtiv mecarbil for the potential treatment of heart failure. We expect to continue the development of CK-274 to assess the potential of CK-274 to improve exercise capacity and relieve symptoms in patients with hyperdynamic ventricular contraction due to HCM.

Clinical development timelines, the likelihood of success and total completion costs vary significantly for each drug candidate and are difficult to estimate. We anticipate that we will determine on an ongoing basis which research and development programs to pursue and how much funding to direct to each program, taking into account the potential scientific and clinical success of each drug candidate. The lengthy process of seeking regulatory approvals and subsequent compliance with applicable regulations requires the expenditure of substantial resources. Any failure by us to obtain and maintain, or any delay in obtaining, regulatory approvals could cause our research and development expenditures to increase and, in turn, could have a material adverse effect on our results of operations.

General and Administrative Expenses

General and administrative expenses for the three and six months ended June 30, 2020 increased by $4.3 million and $7.3 million, respectively, from the three and six months ended June 30, 2019, primarily due to an increase in personnel related costs including stock-based compensation and higher outside service spend. We expect that general and administrative expenses will fluctuate in the future, depending in part on the timing of and investments in commercial readiness.

Interest expense

Interest expense for the three and six months ended June 30, 2020 and 2019, were as follows (in thousands):

	Three Months Ended			Six Months Ended		
	June 30, 2020	June 30, 2019	Increase (Decrease)	June 30, 2020	June 30, 2019	Increase (Decrease)
Term loan	$ 1,205	$ 1,377	$ (172)	$ 2,450	$ 2,547	$ (97)
Convertible notes	2,668	—	2,668	5,298	—	5,298
Warrants	—	—	—	184	—	184
Other	19	—	19	37		37
Total interest expense	$ 3,892	$ 1,377	$ 2,515	$ 7,969	$ 2,547	$ 5,422

Non-cash interest expense on liability related to sale of future royalties

Non-cash interest expense related to liability related to sale of future royalties for the three and six months ended June 30, 2020 and 2019 resulted from accretion of the liability related to the sale of future royalties. We anticipate that this non-cash interest expense will increase in the future primarily due to accretion of the liability over time.

Interest and Other Income, net

Interest and other income, net for the three and six months ended June 30, 2020 and 2019 primarily consisted of interest income generated from our cash, cash equivalents and investments.

Liquidity and Capital Resources

Our cash, cash equivalents and investments and a summary of our borrowings and working capital is summarized as follows:

	June 30, 2020
Financial assets:	
Cash and cash equivalents	$ 61,134
Short-term investments	151,929
Total cash, cash equivalents and marketable securities	$ 213,063
Borrowings:	
Term loan, net	45,631
Convertible notes, net	86,743
Total borrowings	$ 132,374
Working capital:	
Current assets	$ 218,954
Current liabilities	22,696
Working capital	$ 196,258

Sources and Uses of Cash

From inception, we funded our operations through the sale of equity securities, non-equity payments from collaborators, a royalty monetization agreement, long-term debt, capital equipment financings, grants and interest income. We have generated significant operating losses since our inception. Our expenditures are primarily related to research and development activities. Based on current plans, we believe that our existing cash, cash equivalents and investments will be sufficient to fund our cash requirements for at least the next 12 months.

Net cash used in operating activities of $57.6 million in the first half of 2020 was largely due to ongoing research and development activities, and general and administrative expenses to support those activities. Net loss for the first half of 2020 included, among other items: non-cash stock based compensation, non-cash interest expense related to sale of future royalties and non-cash interest expense related to debt.

Net cash provided by investing activities of $78.1 million in the first half of 2020 was primarily due to proceeds from the sales and maturity of investments offset by purchases of investments.

Net cash provided by investing activities of $4.1 million in the first half of 2020 was primarily due to proceeds related to stock based activities, including a $2.2 million claims settlement with certain institutional investors that were beneficial owners of our common stock related to the disgorgement of short swing profits pursuant to Section 16(b) of the Securities Exchange Act of 1934, as amended.

In July 2020, we sold shares of our common stock to the RTW Investors for $50 million and we closed an underwritten public offering and received approximately $189 million in net proceeds. In July 2020, we also received an upfront payment of $25 million under the Ji Xing License Agreement.

Off-Balance Sheet Arrangements

We are not party to any off-balance sheet arrangements that have, or are reasonably likely to have, a material current or future effect on our financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Our exposure to market risk has not changed materially since our disclosures in Item 7A, "Quantitative and Qualitative Disclosures About Market Risk" in our Annual Report on Form 10-K for the year ended December 31, 2019.

ITEM 4. CONTROLS AND PROCEDURES

(a) Evaluation of disclosure controls and procedures

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our reports under the Exchange Act, and the rules and regulations thereunder, is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms and that such information is accumulated and communicated to our management, including our principal executive officer and principal financial officer, or persons performing similar functions, as appropriate, to allow for timely decisions regarding required or necessary disclosure. In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable, not absolute, assurance of achieving the desired control objectives, and we are required to apply judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation of our disclosure controls and procedures as of June 30, 2020, our Chief Executive Officer and Chief Financial Officer concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

(b) Changes in internal control over financial reporting

There were no changes in our internal control over financial reporting that occurred during the quarter ended June 30, 2020, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting. We have not experienced any material impact to our internal controls over financial reporting despite the fact that most of our employees are working remotely due to the COVID-19 pandemic. We are continually monitoring and assessing the COVID-19 situation on our internal controls to minimize the impact on their design and operating effectiveness.

(c) Limitations on the effectiveness of controls

A control system, no matter how well-conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the controls are met. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues, if any, within a company have been detected. Accordingly, our disclosure controls and procedures are designed to provide reasonable, not absolute, assurance that the objectives of our disclosure control system are met.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

None

ITEM 1A. RISK FACTORS

In evaluating our business, you should carefully consider the following risks in addition to the other information in this report. Any of the following risks could materially and adversely affect our business, results of operations, financial condition or your investment in our securities, and many are beyond our control. The risks and uncertainties described below are not the only ones facing us. Additional risks and uncertainties not presently known to us, or that we currently see as immaterial, may also adversely affect our business.

Risks Related to Our Business

We have a history of significant losses and may not achieve or sustain profitability and, as a result, you may lose part or all of your investment.

We have generally incurred operating losses in each year since our inception in 1997, due to costs incurred in connection with our research and development activities and general and administrative costs associated with our operations. Our drug candidates are all in early through late-stage clinical testing, and we and our partners must conduct significant additional clinical trials before we and our partners can seek the regulatory approvals necessary to begin commercial sales of our drugs. We expect to incur increasing losses for at least several more years, as we continue our research activities and conduct development of, and seek regulatory approvals for, our drug candidates, and commercialize any approved drugs. If our drug candidates fail or do not gain regulatory approval, or if our drugs do not achieve market acceptance, we will not be profitable. If we fail to become and remain profitable, or if we are unable to fund our continuing losses, you could lose part or all of your investment.

We will need substantial additional capital in the future to sufficiently fund our operations.

We have consumed substantial amounts of capital to date, and our operating expenditures will increase over the next several years if we expand our research and development activities. We have funded our operations and capital expenditures with proceeds primarily from private and public sales of our equity securities, royalty monetization agreements, a revenue interest agreement, strategic alliances, long-term debt, other financings, interest on investments and grants. We believe that our existing cash and cash equivalents, short-term investments and interest earned on investments should be sufficient to meet our projected operating requirements for at least the next 12 months. We have based this estimate on assumptions that may prove to be wrong, and we could utilize our available capital resources sooner than we currently expect. Because of the numerous risks and uncertainties associated with the development of our drug candidates and other research and development activities, including risks and uncertainties that could impact the rate of progress of our development activities, we are unable to estimate with certainty the amounts of capital outlays and operating expenditures associated with these activities.

For the foreseeable future, our operations will require significant additional funding, in large part due to our research and development expenses and the absence of any revenues from product sales. For example, we will require significant additional funding to enable us to conduct further development of our product candidates. Until we can generate a sufficient amount of product revenue, we expect to raise future capital through strategic alliance and licensing arrangements, public or private equity offerings and debt financings. We do not currently have any commitments for future funding other than through our Royalty Purchase Agreement with RTW Royalty Holdings, the Funding Agreement with RTW Royalty Holdings, and reimbursements, milestone and royalty payments that we may receive under our collaboration agreements with Amgen, Astellas and Ji Xing. We may not receive any further funds under those agreements. Our ability to raise funds may be adversely impacted by current economic conditions. As a result of these and other factors, we do not know whether additional financing will be available when needed, or that, if available, such financing would be on terms favorable to our stockholders or us.

For example, under the Funding Agreement, we have the right to exercise an option to receive up to $90.0 million in cash if certain conditions are met, notably the randomization of a first patient in the first obstructive HCM pivotal clinical trial of CK-274 and/or the randomization of a first patient in the first non-obstructive HCM pivotal clinical trial of CK-274. No assurance can be given that any of such conditions will be fulfilled prior to expiration of our ability to exercise our option pursuant to the Funding Agreement, and all or part of the proceeds made available to us, may need to be utilized for the prepayment or repayment of other outstanding indebtedness at the time under our Loan and Security Agreement, dated as of May 17, 2019, or the Term Loan Agreement, with Oxford Finance LLC, or Oxford, as collateral agent, and Silicon Valley Bank and Oxford as lenders party thereto, or the Lenders, as amended, pursuant to which the Lenders made available to us a $45.0 million loan, or the Term Loan, or any other indebtedness we have outstanding at that time. Moreover, in the event we were to exercise our option pursuant to the Funding Agreement, we would be obligated to make royalty payments to RTW of up to 4% of our net sales of CK-274 in the CK-274 Territory, which may or may not be more favorable to us than prevailing interest rates at the time of exercising such option.

To the extent that we raise additional funds through strategic alliances or licensing or other arrangements with third parties, we will likely have to relinquish valuable rights to our technologies, research programs or drug candidates, grant licenses on terms that may not be favorable to us, or, as in the case of the Funding Agreement, incur obligations to pay amounts based on future sales of our product candidate CK-274. To the extent that we raise additional funds by issuing equity securities, our stockholders will experience additional dilution and our share price may decline. To the extent that we raise additional funds through debt financing, the financing may involve covenants that restrict our business activities. In addition, funding from any of these sources, if needed, may not be available to us on favorable terms, or at all, or in accordance with our planned timelines.

If we cannot raise the funds we need to operate our business, we will need to delay or discontinue certain research and development activities, and our stock price may be negatively affected.

We are obligated to develop and maintain proper and effective internal control over financial reporting. In the future, we may not complete our execution of our internal control over financial reporting in a timely manner, or these internal controls may not be determined to be effective, which may result in additional material misstatements in our consolidated financial statements and may adversely affect investor confidence in our company and, as a result, the value of our common stock.

We are required, pursuant to Section 404 of the Sarbanes-Oxley Act, to furnish a report by management on, among other things, the effectiveness of our internal control over financial reporting.

Complying with Section 404 requires a rigorous compliance program as well as adequate time and resources. We may not be able to complete our internal control evaluation, testing and any required remediation in a timely fashion. Additionally, if we identify one or more material weaknesses in our internal control over financial reporting, we will not be able to assert that our internal controls are effective. A material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting such that

there is a reasonable possibility that a material misstatement of the Company's annual or interim financial statements will not be prevented or detected on a timely basis. As of December 31, 2019, we have remediated the material weakness related to our internal controls over financial reporting that were determined to be ineffective as of December 31, 2018. As of December 31, 2018, we identified a material weakness related to the ineffective review and verification of internally prepared reports and analyses utilized in our financial statement closing process. The material weakness related to employee turnover resulting in a temporary lack of resources in financial reporting roles with the appropriate skills to perform effective review during our financial statement close process. This material weakness did not result in the restatement of prior quarterly or annually filed financial statements. During 2019, management conducted a remediation plan to address its material weakness, which included increasing the quality and level of resources with the accounting department and other enhancements and design improvements to our processes to improve the level of review of financial information.

Even though we remediated this material weakness as of December 31, 2019, we cannot be certain that other material weaknesses and control deficiencies will not be discovered in the future. If our efforts are not successful or other material weaknesses are identified in the future or we are not able to comply with the requirements of Section 404 in a timely manner, our reported financial results could be materially misstated, we would receive an adverse opinion regarding our internal controls over financial reporting from our independent registered public accounting firm, and we could be subject to investigations or sanctions by regulatory authorities, which would require additional financial and management resources, and the value of our common stock could decline. To the extent we identify future weaknesses or deficiencies, there could be material misstatements in our consolidated financial statements and we could fail to meet our financial reporting obligations. As a result, our ability to obtain additional financing, or obtain additional financing on favorable terms, could be materially and adversely affected which, in turn, could materially and adversely affect our business, our financial condition and the value of our common stock. If we are unable to assert that our internal control over financial reporting is effective in the future, or if our independent registered public accounting firm is unable to express an opinion or expresses an adverse opinion on the effectiveness of our internal controls in the future, investor confidence in the accuracy and completeness of our financial reports could be further eroded, which would have a material adverse effect on the price of our common stock.

Our indebtedness and liabilities could limit the cash flow available for our operations, expose us to risks that could adversely affect our business, financial condition and results of operations and impair our ability to satisfy our obligations under the 2026 Notes and our Term Loan.

As of December 31, 2019, we had $183.0 million aggregate principal amount of indebtedness, comprised of $45.0 million under our Term Loan, on a senior secured basis, and $138.0 million under our convertible senior notes due 2026, or the 2026 Notes. Additionally, we have the ability to exercise an option for up to $90.0 million in cash under the Funding Agreement, which, if utilized, will result in additional payment obligations of up to 4% of our net sales of CK-274 in the CK-274 Territory. We may also incur additional indebtedness to meet future financing needs. Our indebtedness could have significant negative consequences for our security holders and our business, results of operations and financial condition by, among other things:

- increasing our vulnerability to adverse economic and industry conditions;
- limiting our ability to obtain additional financing;
- requiring the dedication of a substantial portion of our cash flow from operations to service our indebtedness, which will reduce the amount of cash available for other purposes;
- limiting our flexibility to plan for, or react to, changes in our business;
- diluting the interests of our existing stockholders as a result of issuing shares of our common stock upon conversion of the notes; and
- placing us at a possible competitive disadvantage with competitors that are less leveraged than us or have better access to capital.

Our business may not generate sufficient funds, and we may otherwise be unable to maintain sufficient cash reserves, to pay amounts due under our indebtedness, including the 2026 Notes, and our cash needs may increase in the future. In addition, any required repurchase of the 2026 Notes for cash as a result of a fundamental change would lower our current cash on hand such that we would not have those funds available for us in our business. Further any future indebtedness that we may incur may contain financial and other restrictive covenants that limit our ability to operate our business, raise capital or make payments under our other indebtedness. If we fail to comply with these covenants or to make payments under our indebtedness when due, then we would be in default under that indebtedness, which could, in turn, result in that and our other indebtedness becoming immediately payable in full.

Covenants in our Term Loan Agreement, the indenture related to the 2026 Notes and the Funding Agreement restrict our business and operations in many ways and if we do not effectively manage our covenants, our financial conditions and results of operations could be adversely affected. Our operations may not provide sufficient cash to meet the repayment obligations of our debt incurred under the Term Loan Agreement.

The Term Loan Agreement and the indenture related to the 2026 Notes requires that we comply with certain covenants applicable to us, including among other things, covenants restricting dispositions, changes in business, management, ownership or business locations, mergers or acquisitions, indebtedness, encumbrances, distributions, investments, transactions with affiliates and subordinated debt, any of which could restrict our business and operations, particularly our ability to respond to changes in our business or to take specified actions to take advantage of certain business opportunities that may be presented to us. In addition, should we exercise our option pursuant to the Funding Agreement, such agreement contains certain covenants applicable to us, including among other things, development and commercialization diligence obligations in connection to CK-274, use of proceeds, reporting and encumbrances, which could also restrict our business and operations, particularly in connection to our development and commercialization of CK-274.

Our failure to comply with any of the covenants could result in a default under the Term Loan Agreement, the indenture related to the 2026 Notes, or the Funding Agreement which could permit the creditors to declare all or part of any outstanding borrowings or other payment obligations to be immediately due and payable and/or enforce any outstanding liens against our assets.

In addition, certain provisions in the 2026 Notes and the related indenture could make a third party attempt to acquire us more difficult or expensive. For example, if a takeover constitutes a fundamental change under our indenture, then noteholders will have the right to require us to repurchase their notes for cash. In addition, if a takeover constitutes a make-whole fundamental change under our indenture, then we may be required to temporarily increase the conversion rate. In either case, and in other cases, our obligations under the notes and the Indenture could increase the cost of acquiring us or otherwise discourage a third party from acquiring us or removing incumbent management, including in a transaction that noteholders or holders of our common stock may view as favorable.

If we are unable to repay those amounts, the relevant creditors could proceed against the collateral granted to them to secure that debt (if any), which would seriously harm our business. In addition, should we be unable to comply with these covenants or if we default on any portion of our outstanding borrowings, the Lenders in connection to the Term Loan can also impose a 5.0% penalty. In addition, the Term Loan has interest only payments through July 1, 2021. The interest only period may be extended through December 31, 2021 upon the achievement of positive results in GALACTIC-HF, the trial of omecamtiv mecarbil in chronic heart failure. If we do not achieve some or all of these development milestones, our liquidity and cash position may be harmed.

We will depend on Ji Xing for the development and commercialization of CK-274 in the greater China region.

Under the terms of the Ji Xing License Agreement, Ji Xing will be responsible for the development and commercialization of CK-274 in the greater China region, including mainland China, Hong Kong, Macau and Taiwan. The timing and amount of any milestone and royalty payments we may receive under the Ji Xing License Agreement will depend in part on the efforts and successful commercialization of CK-274 by Ji Xing. We do not control the individual efforts of Ji Xing, and any failure by Ji Xing to devote sufficient time and effort to the development and commercialization of CK-274 or to meet its obligations to us, including for future milestone and royalty payments; or to adequately deploy business continuity plans in the event of a crisis, or to satisfactorily resolve significant disagreements with us could each have an adverse impact on our financial results and operations. We will also depend on Ji Xing to comply with all applicable laws relative to the development and commercialization of CK-274 in the greater China region. If Ji Xing were to violate, or was alleged to have violated, any laws or regulations during the performance of its obligations for us, it is possible that we could suffer financial and reputational harm or other negative outcomes, including possible legal consequences.

Any termination, breach or expiration of the Ji Xing License Agreement could have a material adverse effect on our financial position by reducing or eliminating the potential for us to receive milestones and royalties. In such an event, we may be required to devote additional efforts and to incur additional costs associated with pursuing the development and commercialization of CK-274 in greater China. Alternatively, we may attempt to identify and transact with a new sub-licensee, but there can be no assurance that we would be able to identify a suitable sub-licensee or transact on terms that are favorable to us.

Our right to receive payment under the Royalty Purchase Agreement is conditional upon satisfaction of certain conditions precedent.

On July 14, 2020, we entered into the Royalty Purchase Agreement with RTW, pursuant to which we agreed to sell to RTW Royalty Holdings our right to receive the Mavacamten Royalty under the Collaboration Agreement in consideration for a cash payment by RTW to us of $85.0 million. The Royalty Purchase Agreement is subject to the satisfaction of certain closing conditions, including MyoKardia providing its consent to the sale of the Mavacamten Royalty to RTW Royalty Holdings. In order to complete

this sale transaction, such conditions must be satisfied or waived by RTW Royalty Holdings on or prior to October 12, 2020 or such later date as may be agreed by the parties. Should such conditions fail to be satisfied or waived by RTW Royalty Holdings prior to October 12, 2020 or such later date as may be agreed by the parties, RTW will have the right to terminate the Royalty Purchase Agreement, in which case we will retain our rights to the Mavacamten Royalty, but RTW Royalty Holdings will no longer be under any obligation to pay the purchase price to us.

We have never generated, and may never generate, revenues from commercial sales of our drugs and we will not have drugs to market for at least several years, if ever.

We currently have no drugs for sale and we cannot guarantee that we will ever develop or obtain approval to market any drugs. To receive marketing approval for any drug candidate, we must demonstrate that the drug candidate satisfies rigorous standards of safety and efficacy to the FDA in the United States and other regulatory authorities abroad. We and our partners will need to conduct significant additional research and preclinical and clinical testing before we or our partners can file applications with the FDA or other regulatory authorities for approval of any of our drug candidates. In addition, to compete effectively, our drugs must be easy to use, cost-effective, covered by insurance or government sponsored medical plans, and economical to manufacture on a commercial scale, compared to other therapies available for the treatment of the same conditions. We may not achieve any of these objectives. Currently, our clinical-stage drug candidates include omecamtiv mecarbil for the potential treatment of heart failure and reldesemtiv for the potential treatment of ALS and potentially other indications associated with muscle weakness. We cannot be certain that the clinical development of our current or any future drug candidates will be successful, that they will receive the regulatory approvals required to commercialize them, that they will ultimately be accepted by prescribers or reimbursed by insurers or that any of our other research programs will yield a drug candidate suitable for clinical testing or commercialization. Our commercial revenues, if any, will be derived from sales of drugs that we do not expect to be commercially marketed for at least several years, if at all. The development of any one or all of these drug candidates may be discontinued at any stage of our clinical trials programs and we may not generate revenue from any of these drug candidates.

Clinical trials may fail to demonstrate the desired safety and efficacy of our drug candidates, which could prevent or significantly delay completion of clinical development and regulatory approval.

Prior to receiving approval to commercialize any of our drug candidates, we or our partners must adequately demonstrate to the satisfaction of FDA and foreign regulatory authorities that the drug candidate is sufficiently safe and effective with substantial evidence from well-controlled clinical trials. We or our partners will need to demonstrate efficacy in clinical trials for the treatment of specific indications and monitor safety throughout the clinical development process and following approval. None of our drug candidates have yet met the safety and efficacy standards required for regulatory approval for commercialization and they may never do so. In addition, for each of our preclinical compounds, we or our partners must adequately demonstrate satisfactory chemistry, formulation, quality, stability and toxicity in order to submit an IND to the FDA, or an equivalent application in foreign jurisdictions, that would allow us to advance that compound into clinical trials. Furthermore, we or our partners may need to submit separate INDs (or foreign equivalent) to different divisions within the FDA (or foreign regulatory authorities) in order to pursue clinical trials in different therapeutic areas. Each new IND (or foreign equivalent) must be reviewed by the new regulatory division before the clinical trial under its jurisdiction can proceed, entailing all the risks of delay inherent to regulatory review. If our or our partners' current or future preclinical studies or clinical trials are unsuccessful, our business will be significantly harmed and our stock price could be negatively affected.

All of our drug candidates are prone to the risks of failure inherent in drug development. Preclinical studies may not yield results that would adequately support the filing of an IND (or a foreign equivalent) with respect to our potential drug candidates. Even if the results of preclinical studies for a drug candidate are sufficient to support such a filing, the results of preclinical studies do not necessarily predict the results of clinical trials. As an example, because the physiology of animal species used in preclinical studies may vary substantially from other animal species and from humans, it may be difficult to assess with certainty whether a finding from a study in a particular animal species will result in similar findings in other animal species or in humans. For any of our drug candidates, the results from Phase 1 clinical trials in healthy volunteers and clinical results from Phase 1 and 2 trials in patients are not necessarily indicative of the results of later and larger clinical trials that are necessary to establish whether the drug candidate is safe and effective for the applicable indication. Likewise, interim results from a clinical trial may not be indicative of the final results from that trial, and results from early Phase 2 clinical trials may not be indicative of the results from later clinical trials. For example, early Phase 2 clinical trials of tirasemtiv in patients with ALS showed encouraging dose-related trends in measurements of the ALSFRS-R, a clinically validated instrument designed to measure disease progression and changes in functional status, for patients receiving tirasemtiv compared to those receiving placebo. However, BENEFIT-ALS, a Phase 2b clinical trial of tirasemtiv in patients with ALS, did not achieve its primary efficacy endpoint, the mean change from baseline in the ALSFRS-R for patients receiving tirasemtiv compared to those receiving placebo, and in November 2017, we announced that VITALITY-ALS did not achieve its primary endpoint or secondary endpoints. Following the results of VITALITY-ALS, we suspended development of tirasemtiv.

Moreover, the Phase 2 clinical trial of reldesemtiv in COPD and Phase 1b clinical trial of reldesemtiv in elderly subjects with limited mobility did not show efficacy, and there can be no assurance that reldesemtiv will demonstrate efficacy in other indications, regardless of the phase of development.

In addition, while the clinical trials of our drug candidates are designed based on the available relevant information, such information may not accurately predict what actually occurs during the course of the trial itself, which may have consequences for the conduct of an ongoing clinical trial or for the eventual results of that trial. For example, the number of patients planned to be enrolled in a placebo-controlled clinical trial is determined in part by estimates relating to expected treatment effect and variability about the primary endpoint. These estimates are based upon earlier non-clinical and clinical studies of the drug candidate itself and clinical trials of other drugs thought to have similar effects in a similar patient population. If information gained during the conduct of the trial shows these estimates to be inaccurate, we may elect to adjust the enrollment accordingly, which may cause delays in completing the trial, additional expense or a statistical penalty to apply to the evaluation of the trial results.

Furthermore, in view of the uncertainties inherent in drug development, such clinical trials may not be designed with focus on indications, patient populations, dosing regimens, endpoints, safety, efficacy or pharmacokinetic parameters or other variables that will provide the necessary safety or efficacy data to support regulatory approval to commercialize the resulting drugs. For example, we believe that effects on respiratory function, including SVC, may be appropriate as a clinical endpoint for reldesemtiv; however, regulatory authorities may not accept these effects as a clinical endpoint to support registration of reldesemtiv for the treatment of ALS. Clinical trials of our drug candidates are designed based on guidance or advice from regulatory agencies, which is subject to change during the development of the drug candidate at any time. Such a change in a regulatory agency's guidance or advice may cause that agency to deem results from trials to be insufficient to support approval of the drug candidate and require further clinical trials of that drug candidate to be conducted. In addition, individual patient responses to the dose administered of a drug may vary in a manner that is difficult to predict. Also, the methods we select to assess particular safety, efficacy or pharmacokinetic parameters may not yield the same statistical precision in estimating our drug candidates' effects as may other methodologies. Even if we believe the data collected from clinical trials of our drug candidates are promising, these data may not be sufficient to support approval by the FDA or foreign regulatory authorities. Non-clinical and clinical data can be interpreted in different ways. Accordingly, the FDA or foreign regulatory authorities could interpret these data in different ways from us or our partners, which could delay, limit or prevent regulatory approval.

Furthermore, while planned interim analyses in clinical trials can enable early terminations for futility or for overwhelming efficacy, the timing, which can be based on accrual of events, enrollment or other factors, and the results of such analyses, is unpredictable.

GALACTIC-HF is being conducted under an SPA agreement with FDA. However, even where the FDA agrees to the design, execution and analysis proposed in protocols reviewed under the SPA process, the FDA may revoke or alter its agreement in certain circumstances, and the FDA retains significant latitude and discretion in interpreting the terms of the SPA agreement and the data and results from any study that is subject to the SPA agreement. There is no guarantee that either the trial will be successful, or even if successful, that FDA would approve any resulting NDA.

Administering any of our drug candidates or potential drug candidates may produce undesirable side effects, also known as adverse events. Toxicities and adverse events observed in preclinical studies for some compounds in a particular research and development program may also occur in preclinical studies or clinical trials of other compounds from the same program. Potential toxicity issues may arise from the effects of the active pharmaceutical ingredient itself or from impurities or degradants that are present in the active pharmaceutical ingredient or could form over time in the formulated drug candidate or the active pharmaceutical ingredient. These toxicities or adverse events could delay or prevent the filing of an IND (or a foreign equivalent) with respect to our drug candidates or potential drug candidates or cause us, our partners or the FDA or foreign regulatory authorities to modify, suspend or terminate clinical trials with respect to any drug candidate at any time during the development program. Further, the administration of two or more drugs contemporaneously can lead to interactions between them, and our drug candidates may interact with other drugs that trial subjects are taking. If the adverse events are severe or frequent enough to outweigh the potential efficacy of a drug candidate, the FDA or other regulatory authorities could deny approval of that drug candidate for any or all targeted indications. Even if one or more of our drug candidates were approved for sale as drugs, the occurrence of even a limited number of adverse events or toxicities when used in large populations may cause the FDA or foreign regulatory authorities to impose restrictions on, or stop, the further marketing of those drugs. Indications of potential adverse events or toxicities which do not seem significant during the course of clinical trials may later turn out to actually constitute serious adverse events or toxicities when a drug is used in large populations or for extended periods of time.

We have observed certain adverse events in the clinical trials conducted with our drug candidates. For example, in clinical trials of omecamtiv mecarbil, adverse events of chest discomfort, palpitations, dizziness and feeling hot, increases in heart rate, declines in blood pressure, electrocardiographic changes consistent with acute myocardial ischemia and transient rises in the MB fraction of creatine kinase and cardiac troponins I and T, which are indicative of myocardial infarction were observed during treatment with omecamtiv mecarbil.

In addition, clinical trials of reldesemtiv and omecamtiv mecarbil enroll patients who typically suffer from serious diseases which put them at increased risk of death. These patients may die while receiving our drug candidates. In such circumstances, it may not be possible to exclude with certainty a causal relationship to our drug candidate, even though the responsible clinical investigator may view such an event as not study drug-related.

Any failure or significant delay in completing preclinical studies or clinical trials for our drug candidates, or in receiving and maintaining regulatory approval for the sale of any resulting drugs, may significantly harm our business and negatively affect our stock price.

The failure of a number of Phase 3 clinical trials evaluating other compounds as potential treatments for patients with ALS may suggest an increased risk that our clinical development program of reldesemtiv in patients with ALS will also fail.

In recent years, a number of Phase 3 clinical trials of potential treatments for ALS have failed to demonstrate the requisite efficacy for regulatory approval or for their continued development. These include our trial of tirasemtiv known as VITALITY-ALS, Biogen's trial of dexpramipexole, known as EMPOWER, the National Institute of Neurological Disorders and Stroke's trial of ceftriaxone, and Trophos SA's trial of olesoxime. Reldesemtiv, like these compounds, may fail in clinical development if it does not show a statistically significant level of clinical efficacy or if the adverse event profile is too great compared to its benefits. Further, even if we believe the data collected from the planned clinical development program of reldesemtiv are promising and should support approval, the FDA or other regulatory authorities may not deem these data to be sufficient to support approval.

Clinical trials are expensive, time-consuming and subject to delay.

Clinical trials are subject to rigorous regulatory requirements and are very expensive, difficult and time-consuming to design and implement. The length of time and number of trial sites and patients required for clinical trials vary substantially based on the type, complexity, novelty, intended use of the drug candidate and safety concerns. Clinical trials of our current drug candidates can each continue for several more years. However, the clinical trials for all or any of our drug candidates may take significantly longer to complete. The commencement and completion of our or our partners' clinical trials could be delayed or prevented by many factors, including, but not limited to:

- delays in obtaining, or inability to obtain, regulatory or other approvals to commence and conduct clinical trials in the manner we or our partners deem necessary for the appropriate and timely development of our drug candidates and commercialization of any resulting drugs;
- delays in identifying and reaching agreement, or inability to identify and reach agreement, on acceptable terms, with prospective clinical trial sites and other entities involved in the conduct of our or our partners' clinical trials;
- delays or additional costs in developing, or inability to develop, appropriate formulations of our drug candidates for clinical trial use;
- slower than expected rates of patient recruitment and enrollment;
- for those drug candidates that are the subject of a strategic alliance, delays in reaching agreement with our partner as to appropriate development strategies;
- a regulatory authority may require changes to a protocol for a clinical trial that then may require approval from regulatory agencies in other jurisdictions where the trial is being conducted;
- an institutional review board ("IRB") or its foreign equivalent may require changes to a protocol that then require approval from regulatory agencies and other IRBs and their foreign equivalents, or regulatory authorities may require changes to a protocol that then require approval from the IRBs or their foreign equivalents;
- for clinical trials conducted in foreign countries, the time and resources required to identify, interpret and comply with foreign regulatory requirements or changes in those requirements, and political instability or natural disasters occurring in those countries;
- lack of effectiveness of our drug candidates during clinical trials;

- unforeseen safety issues;
- inadequate supply, or delays in the manufacture or supply, of clinical trial materials;
- uncertain dosing issues;
- failure by us, our partners, or clinical research organizations, investigators or site personnel engaged by us or our partners to comply with good clinical practices and other applicable laws and regulations, including those concerning informed consent;
- inability or unwillingness of investigators or their staffs to follow clinical protocols;
- failure by our clinical research organizations, clinical manufacturing organizations and other third parties supporting our or our partners' clinical trials to fulfill their obligations;
- inability to monitor patients adequately during or after treatment;
- introduction of new therapies or changes in standards of practice or regulatory guidance that render our drug candidates or their clinical trial endpoints obsolete; and
- results from non-clinical studies that may adversely impact the timing or further development of our drug candidates.

We do not know whether planned clinical trials will begin on time, or whether planned or currently ongoing clinical trials will need to be restructured or will be completed on schedule, if at all. Significant delays in clinical trials will impede our ability to commercialize our drug candidates and generate revenue and could significantly increase our development costs.

If we encounter difficulties enrolling patients in our clinical trials, our clinical development activities could be delayed or otherwise adversely affected.

The timely completion of clinical trials in accordance with their protocols depends, among other things, on our ability to enroll a sufficient number of patients who remain in the trial until its conclusion. We may experience difficulties in patient enrollment in clinical trials for a variety of reasons. The enrollment of patients depends on many factors, including:

- the patient eligibility criteria defined in the protocol;
- the size of the patient population required for analysis of the trial's primary endpoints;
- the proximity of patients to study sites;
- the design of the trial;
- the ability to recruit clinical trial investigators with the appropriate competencies and experience;
- clinicians' and patients' perceptions as to the potential advantages of the product candidate being studied in relation to other available therapies or clinical trials, including any new drugs that may be approved for the indications we are investigating or clinical trial results;
- the ability to obtain and maintain patient consents; and
- the risk that patients enrolled in clinical trials will drop out of the trials before completion.

In addition, our and our partners' clinical trials will compete with other clinical trials for product candidates that are in the same therapeutic areas as our and our partners' product candidates, and this competition will reduce the number and types of patients available to us, because some patients who might have opted to enroll in our or our partners' trials may instead opt to enroll in a trial being conducted by one of our competitors. Since the number of qualified clinical investigators is limited, we expect to conduct some of our or our partners' clinical trials at the same clinical trial sites that some of our competitors use, which will reduce the number of patients who are available for our clinical trials in such clinical trial site.

Delays in patient enrollment may result in increased costs or may affect the timing or outcome of the planned clinical trials, which could prevent completion of these trials and adversely affect our and our partners' ability to advance the development of product candidates.

We depend on Amgen for the conduct and funding of the development and commercialization of omecamtiv mecarbil.

Under our strategic alliance, Amgen holds an exclusive worldwide license to our drug candidate omecamtiv mecarbil. As a result, Amgen is responsible for the development and obtaining and maintaining regulatory approval of omecamtiv mecarbil for the potential treatment of heart failure worldwide.

Amgen is conducting GALACTIC-HF, a Phase 3 clinical trial of omecamtiv mecarbil. We do not control the development activities being conducted or that may be conducted in the future by Amgen, including, but not limited to, the timing of initiation, termination or completion of clinical trials, the analysis of data arising out of those clinical trials or the timing of release of data concerning those clinical trials, which may impact our ability to report on Amgen's results. Amgen may conduct these activities more slowly or in a different manner than we would if we controlled the development of omecamtiv mecarbil. Amgen is responsible for submitting future applications to the FDA and other regulatory authorities for approval of omecamtiv mecarbil and will be the owner of marketing approvals issued by the FDA and other regulatory authorities for omecamtiv mecarbil, subject to Servier's exclusive rights for the commercialization of omecamtiv mecarbil in Europe, as well as the CIS, including Russia. If the FDA or other regulatory authorities approve omecamtiv mecarbil, Amgen will also be responsible for the marketing and sale of the resulting drug, subject to our right to co-promote omecamtiv mecarbil in North America in connection with the exercise of our option to co-fund Phase 3 development costs of omecamtiv mecarbil under the collaboration and subject to Servier's exclusive rights for the commercialization of omecamtiv mecarbil in Europe, as well as the CIS, including Russia. However, we cannot control whether Amgen will devote sufficient attention and resources to the development of omecamtiv mecarbil or will proceed in an expeditious manner, even with our exercise of our option and co-funding of the Phase 3 development program of omecamtiv mecarbil. Even if the FDA or other regulatory agencies approve omecamtiv mecarbil, Amgen or Servier may elect not to proceed with the commercialization of the resulting drug in one or more countries.

Disputes may arise between us and Amgen, which may delay or cause the termination of any clinical trials of omecamtiv mecarbil, result in significant litigation or cause Amgen to act in a manner that is not in our best interest. The costs associated with the continuing development of omecamtiv mecarbil may cause Amgen to reconsider the terms of its investment and seek to amend or terminate our collaboration agreement or to suspend the development of omecamtiv mecarbil. If development of omecamtiv mecarbil does not progress for these or any other reasons, we would not receive further milestone payments or royalties on product sales from Amgen with respect to omecamtiv mecarbil. If the results of one or more clinical trials with omecamtiv mecarbil do not meet Amgen's expectations at any time, Amgen may elect to terminate further development of omecamtiv mecarbil or certain of the potential clinical trials for omecamtiv mecarbil, even if the actual number of patients treated at that time is relatively small. In addition, Amgen generally has discretion to elect whether to pursue or abandon the development of omecamtiv mecarbil and may terminate our strategic alliance for any reason upon six months prior notice. With our consent, Amgen granted Servier an option to commercialize omecamtiv mecarbil in Europe and the CIS, including Russia, which Servier decided to exercise. In August 2016, we entered into a letter agreement with Amgen and Servier, which provides that if Amgen's rights to omecamtiv mecarbil are terminated with respect to the territory subject to Servier's sublicense, the sublicensed rights previously granted by Amgen to Servier with respect to omecamtiv mecarbil will remain in effect and become a direct license or sublicense of such rights by us to Servier, on substantially the same terms as those in the Option, License and Collaboration Agreement between Amgen and Servier. If Amgen abandons omecamtiv mecarbil, it would result in a delay in or could prevent us from commercializing omecamtiv mecarbil and would delay and could prevent us from obtaining revenues for this drug candidate. In addition, we would be required to provide Servier with a direct license or sublicense and the rights to commercialize omecamtiv mecarbil in Europe and the CIS, including Russia, on terms that were not negotiated by us. There can be no assurance that we would be able to negotiate and enter into a definitive agreement with Servier on terms favorable or acceptable to us, or at all.

If Amgen abandons development of omecamtiv mecarbil prior to regulatory approval or if it elects not to proceed with commercialization of the resulting drug following regulatory approval, we would have to seek a new partner for development or commercialization, curtail or abandon that development or commercialization, or undertake and fund the development of omecamtiv mecarbil or commercialization of the resulting drug ourselves. If we seek a new partner but are unable to do so on acceptable terms, or at all, or do not have sufficient funds to conduct the development or commercialization of omecamtiv mecarbil ourselves, we would have to curtail or abandon that development or commercialization, which could harm our business.

If we do not enter into strategic alliances for our unpartnered drug candidates or research and development programs or fail to successfully maintain our current or future strategic alliances, we may have to reduce, delay or discontinue our advancement of our drug candidates and programs or expand our research and development capabilities and increase our expenditures.

Drug development is complicated and expensive. We currently have limited financial and operational resources to carry out drug development. Our strategy for developing, manufacturing and commercializing our drug candidates currently requires us to enter into and successfully maintain strategic alliances with pharmaceutical companies or other industry participants to advance our programs and reduce our expenditures on each program. Accordingly, the success of our development activities depends in large part on our current and future strategic partners' performance, over which we have little or no control.

Our ability to commercialize drugs that we develop with our partners and that generate royalties from product sales depends on our partners' abilities to assist us in establishing the safety and efficacy of our drug candidates, obtaining and maintaining regulatory approvals and achieving market acceptance of the drugs once commercialized. Our partners may elect to delay or terminate development of one or more drug candidates, independently develop drugs that could compete with ours or fail to commit sufficient resources to the marketing and distribution of drugs developed through their strategic alliances with us. Our partners may not proceed with the development and commercialization of our drug candidates with the same degree of urgency as we would because of other priorities they face. In addition, new business combinations or changes in a partner's business strategy may adversely affect its willingness or ability to carry out its obligations under a strategic alliance.

If we are not able to successfully maintain our existing strategic alliances or establish and successfully maintain additional strategic alliances, we will have to limit the size or scope of, or delay or discontinue, one or more of our drug development programs or research programs, or undertake and fund these programs ourselves. Alternatively, if we elect to continue to conduct any of these drug development programs or research programs on our own, we will need to expand our capability to conduct clinical development by bringing additional skills, technical expertise and resources into our organization. This would require significant additional funding, which may not be available to us on acceptable terms, or at all.

To the extent we elect to fund the development of a drug candidate, or the commercialization of a drug at our expense, we will need substantial additional funding.

The discovery, development and commercialization of new drugs is costly. As a result, to the extent we elect to fund the development of a drug candidate or the commercialization of a drug, we will need to raise additional capital to:

- fund clinical trials and seek regulatory approvals;
- expand our development capabilities;
- engage third-party manufacturers for such drug candidate or drug;
- build or access commercialization capabilities;
- implement additional internal systems and infrastructure;
- maintain, defend and expand the scope of our intellectual property; and
- hire and support additional management and scientific personnel.

Our future funding requirements will depend on many factors, including, but not limited to:

- the rate of progress and costs of our or our partners' clinical trials and other research and development activities;
- the costs and timing of seeking and obtaining regulatory approvals;
- the costs associated with establishing manufacturing and commercialization capabilities;
- the costs of filing, prosecuting, defending and enforcing any patent claims and other intellectual property rights;
- the costs of acquiring or investing in businesses, products and technologies;
- the effect of competing technological and market developments; and
- the status of, payment and other terms, and timing of any strategic alliance, licensing or other arrangements that we have entered into or may establish.

Until we can generate a sufficient amount of product revenue to finance our cash requirements, which we may never do, we expect to continue to finance our future cash needs primarily through strategic alliances and other financings. We cannot be certain that additional funding will be available on acceptable terms, or at all. If we are not able to secure additional funding when needed, we may have to delay, reduce the scope of or eliminate one or more of our clinical trials or research and development programs or future commercialization initiatives.

We depend on CROs to conduct our clinical trials and have limited control over their performance. If these CROs do not successfully carry out their contractual duties or meet expected deadlines, or if we lose any of our CROs, we may not be able to obtain regulatory approval for or commercialize our product candidates on a timely basis, if at all.

We have used and intend to continue to use a limited number of CROs within and outside of the United States to conduct clinical trials of our drug candidates and related activities. We do not have control over many aspects of our CROs' activities, and cannot fully control the amount, timing or quality of resources that they devote to our programs. CROs may not assign as high a priority to our programs or pursue them as diligently as we would if we were undertaking these programs ourselves. The activities conducted by our CROs therefore may not be completed on schedule or in a satisfactory manner. CROs may also give higher priority to relationships with our competitors and potential competitors than to their relationships with us. Outside of the United States, we are particularly dependent on our CROs' expertise in communicating with clinical trial sites and regulatory authorities and ensuring that our clinical trials and related activities and regulatory filings comply with applicable laws.

Our CROs' failure to carry out development activities on our behalf as agreed and in accordance with our and the FDA's or other regulatory agencies' requirements and applicable U.S. and foreign laws, or our failure to properly coordinate and manage these activities, could increase the cost of our operations and delay or prevent the development, approval and commercialization of our drug candidates. For example, in June 2013, we learned from our data management vendor for BENEFIT-ALS that a programming error in the electronic data capture system controlling study drug assignment caused 58 patients initially randomized to and treated with tirasemtiv to receive placebo instead at a certain trial visit and for the remainder of the trial. In order to maintain the originally intended statistical power of the trial, we amended the protocol to permit enrollment of approximately 680 patients, or 180 patients in addition to the 500 patients allowed under the existing protocol. This protocol amendment resulted in additional costs and delays in conducting BENEFIT-ALS. Further, for the quarter ended September 30, 2016, we determined that there was an error in the accounting for the recognition of clinical research and development expenses related to the information received from one of our CROs, which resulted in a restatement of our clinical research and development expenses, related clinical accrual accounts and related financial disclosures as of and for the three and nine month periods ended September 30, 2016. In addition, if a CRO fails to perform as agreed, our ability to collect damages may be contractually limited. If we fail to effectively manage the CROs carrying out the development of our drug candidates or if our CROs fail to perform as agreed, the commercialization of our drug candidates will be delayed or prevented. In many cases, our CROs have the right to terminate their agreements with us in the event of an uncured material breach. Identifying, qualifying and managing performance of third-party service providers can be difficult, time consuming and cause delays in our development programs. In addition, there is a natural transition period when a new CRO commences work and the new CRO may not provide the same type or level of services as the original provider. If any of our relationships with our third-party CROs terminate, we may not be able to enter into arrangements with alternative CROs or to do so timely or on commercially reasonable terms.

We have no manufacturing capacity and depend on our strategic partners and contract manufacturers to produce our clinical trial materials, including our drug candidates, and anticipate continued reliance on contract manufacturers for the development and commercialization of our potential drugs.

We do not currently operate manufacturing facilities for clinical or commercial production of our drug candidates. We have limited experience in drug formulation and manufacturing, and we lack the resources and the capabilities to manufacture any of our drug candidates on a clinical or commercial scale. Amgen has assumed responsibility to conduct these activities for the ongoing development of omecamtiv mecarbil worldwide. Prior to entry into the Astellas FSRA Agreement, Astellas had primary responsibility for the manufacturing for the ongoing development of reldesemtiv worldwide. Now that we have assumed responsibility for the ongoing development of reldesemtiv worldwide, we will need to effect a transfer of manufacturing of reldesemtiv to one or more contract manufacturers and to rely on such contract manufacturers for future supply. If any partner were to terminate the development of any of our other existing drug candidates, we may need to rely on contract manufacturers for the ongoing supply of those drug candidates as well. Moreover, under the Ji Xing License Agreement, we have committed to providing Ji Xing with supply of CK-274 for development and commercialization of CK-274 in the greater China region, which we will have to source from our contract manufacturers. We expect to rely on contract manufacturers to supply all future drug candidates for which we conduct development, as well as other materials required to conduct our clinical trials, and to fulfil our obligations under the Ji Xing License Agreement. If any of our existing or future contract manufacturers fail to perform satisfactorily, it could delay development or regulatory approval of our drug candidates or commercialization of our drugs, producing additional losses and depriving us of potential product revenues, and also lead to our breach of the Ji Xing License Agreement, giving rise to the ability to terminate such agreement and other adverse consequences as stipulated in the Ji Xing License Agreement. In addition, if a contract manufacturer fails to perform as agreed, our ability to collect damages may be contractually limited.

Our drug candidates require precise high-quality manufacturing. The failure to achieve and maintain high manufacturing standards, including failure to detect or control anticipated or unanticipated manufacturing errors or the frequent occurrence of such errors, could result in patient injury or death, discontinuance or delay of ongoing or planned clinical trials, delays or failures in product testing or delivery, cost overruns, product recalls or withdrawals and other problems that could seriously hurt our business. Contract drug manufacturers often encounter difficulties involving production yields, quality control and quality assurance and shortages of qualified personnel. These manufacturers are subject to stringent regulatory requirements, including the FDA's current good manufacturing practices regulations and similar foreign laws and standards. Each contract manufacturer must pass a pre-approval inspection before we can obtain marketing approval for any of our drug candidates and following approval will be subject to ongoing periodic unannounced inspections by the FDA, the U.S. Drug Enforcement Agency and other regulatory agencies, to ensure strict compliance with current good manufacturing practices and other applicable government regulations and corresponding foreign laws and standards. We seek to ensure that our contract manufacturers comply fully with all applicable regulations, laws and standards. However, we do not have control over our contract manufacturers' compliance with these regulations, laws and standards. If one of our contract manufacturers fails to pass its pre-approval inspection or maintain ongoing compliance at any time, the production of our drug candidates could be interrupted, resulting in delays or discontinuance of our clinical trials, additional costs and potentially lost revenues. In addition, failure of any third-party manufacturers or us to comply with applicable regulations, including pre- or post-approval inspections and the current good manufacturing practice requirements of the FDA or other comparable regulatory agencies, could result in sanctions being imposed on us. These sanctions could include fines, injunctions, civil penalties, failure of regulatory authorities to grant marketing approval of our products, delay, suspension or withdrawal of approvals, license revocation, product seizures or recalls, operational restrictions and criminal prosecutions, any of which could significantly and adversely affect our business.

In addition, our existing and future contract manufacturers may not perform as agreed or may not remain in the contract manufacturing business for the time required to successfully produce, store and distribute our drug candidates. If a natural disaster, business failure, strike or other difficulty occurs, we may be unable to replace these contract manufacturers in a timely or cost-effective manner and the production of our drug candidates would be interrupted, resulting in delays, loss of customers and additional costs.

Switching manufacturers or manufacturing sites would be difficult and time-consuming because the number of potential manufacturers is limited. In addition, before a drug from any replacement manufacturer or manufacturing site can be commercialized, the FDA and, in some cases, foreign regulatory agencies, must approve that site. These approvals would require regulatory testing and compliance inspections. A new manufacturer or manufacturing site also would have to be educated in, or develop substantially equivalent processes for, production of our drugs and drug candidates. It may be difficult or impossible to transfer certain elements of a manufacturing process to a new manufacturer or for us to find a replacement manufacturer on acceptable terms quickly, or at all, either of which would delay or prevent our ability to develop drug candidates and commercialize any resulting drugs.

We may not be able to successfully manufacture our drug candidates in sufficient quality and quantity, which would delay or prevent us from developing our drug candidates and commercializing resulting approved drugs, if any.

To date, our drug candidates have been manufactured in quantities adequate for preclinical studies and early through late-stage clinical trials. In order to conduct large scale clinical trials for a drug candidate and for commercialization of the resulting drug if that drug candidate is approved for sale, we will need to manufacture some drug candidates in larger quantities. We may not be able to successfully repeat or increase the manufacturing capacity for any of our drug candidates, whether in collaboration with third-party manufacturers or on our own, in a timely or cost-effective manner or at all. If a contract manufacturer makes improvements in the manufacturing process for our drug candidates, we may not own, or may have to share, the intellectual property rights to those improvements. Significant changes or scale-up of manufacturing may require additional validation studies, which are costly and which regulatory authorities must review and approve. In addition, quality issues may arise during those changes or scale-up activities because of the inherent properties of a drug candidate itself or of a drug candidate in combination with other components added during the manufacturing and packaging process, or during shipping and storage of the finished product or active pharmaceutical ingredients. If we are unable to successfully manufacture of any of our drug candidates in sufficient quality and quantity, the development of that drug candidate and regulatory approval or commercial launch for any resulting drugs may be delayed or there may be a shortage in supply, which could significantly harm our business. In addition, data demonstrating the stability of both drug substance and drug product, using the commercial manufacturing process and at commercial scale, are required for marketing applications. Failure to produce drug substance and drug products in a timely manner and obtain stability data could result in delay of submission of marketing applications.

The mechanisms of action of our drug candidates are unproven, and we do not know whether we will be able to develop any drug of commercial value.

We have discovered and develop drug candidates that have what we believe are novel mechanisms of action directed against cytoskeletal targets. Because no currently-approved drugs appear to operate via the same biochemical mechanisms as our compounds, we cannot be certain that our drug candidates will result in commercially viable drugs that safely and effectively treat the indications for which we intend to develop them. The results we have seen for our compounds in preclinical models may not translate into similar results in humans, and results of early clinical trials in humans may not be predictive of the results of larger clinical trials that may later be conducted with our drug candidates. Even if we are successful in developing and receiving regulatory approval for a drug candidate for the treatment of a particular disease, we cannot be certain that it will be accepted by prescribers or be reimbursed by insurers or that we will also be able to develop and receive regulatory approval for that or other drug candidates for the treatment of other diseases. If we or our partners are unable to successfully develop and commercialize our drug candidates, our business will be materially harmed.

Moreover, in the event any of our competitors were to develop their own drug candidates that have a similar mechanism of action to any of our drug candidates and compounds, any efficacy or safety concerns identified during the development of such similar drug candidates may have an adverse impact on the development of our own drug candidates. For example, if a competitors' drug candidate having a similar mechanism of action as any of our own drug candidates is shown in clinical trials to give rise to serious safety concerns or have poor efficacy when administered to the target patient population, the FDA or other regulatory bodies may subject our drug candidates to increased scrutiny, leading to additional delays in development and potentially decreasing the chance of ultimate approval of our own drug candidates.

Our success depends substantially upon our ability to obtain and maintain intellectual property protection relating to our drug candidates, compounds and research technologies.

We own, co-own or hold exclusive licenses to a number of U.S. and foreign patents and patent applications directed to our drug candidates, compounds and research technologies. Our success depends on our ability to obtain patent protection both in the United States and in other countries for our drug candidates, their methods of manufacture and use, and our technologies. Our ability to protect our drug candidates, compounds and technologies from unauthorized or infringing use by third parties depends substantially on our ability to obtain and enforce our patents. If our issued patents and patent applications, if granted, do not adequately describe, enable or otherwise provide coverage of our technologies and drug candidates, we or our licensees would not be able to exclude others from developing or commercializing these drug candidates. Furthermore, the degree of future protection of our proprietary rights is uncertain because legal means may not adequately protect our rights or permit us to gain or keep our competitive advantage. If we are unable to obtain and maintain sufficient intellectual property protection for our technologies and drug candidates, or if the scope of the intellectual property protection obtained is not sufficiently broad, our competitors could develop and commercialize drug candidates similar or identical to ours, and our ability to successfully commercialize product candidates that we may pursue may be impaired.

Obtaining and enforcing biopharmaceutical patents is costly, time consuming and complex, and we may not be able to file and prosecute all necessary or desirable patent applications, or maintain, enforce and license any patents that may issue from such patent applications, at a reasonable cost or in a timely manner. It is also possible that we will fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection. We may not have the right to control the preparation, filing and prosecution of patent applications, or to maintain the rights to patents licensed to third parties. Therefore, these patents and applications may not be prosecuted and enforced in a manner consistent with the best interests of our business.

Due to evolving legal standards relating to the patentability, validity and enforceability of patents covering pharmaceutical inventions and the claim scope of these patents, our ability to enforce our existing patents and to obtain and enforce patents that may issue from any pending or future patent applications is uncertain and involves complex legal, scientific and factual questions. The standards which the U.S. Patent and Trademark Office and its foreign counterparts use to grant patents are not always applied predictably or uniformly and are subject to change. To date, no consistent policy has emerged regarding the breadth of claims allowed in biotechnology and pharmaceutical patents. Thus, we cannot be sure that any patents will issue from any pending or future patent applications owned by, co-owned by or licensed to us. Even if patents do issue, we cannot be sure that the claims of these patents will be held valid or enforceable by a court of law, will provide us with any significant protection against competitive products, or will afford us a commercial advantage over competitive products. In particular:

- we or our licensors might not have been the first to make the inventions covered by each of our pending patent applications or issued patents;
- we or our licensors might not have been the first to file patent applications for the inventions covered by our pending patent applications or issued patents;

- others may independently develop similar or alternative technologies or duplicate any of our technologies without infringing our intellectual property rights;
- some or all of our or our licensors' pending patent applications may not result in issued patents or the claims that issue may be narrow in scope and not provide us with competitive advantages;
- our and our licensors' issued patents may not provide a basis for commercially viable drugs or therapies or may be challenged and invalidated by third parties;
- our or our licensors' patent applications or patents may be subject to interference, post-grant proceedings, derivation, reexamination, inter partes review, opposition or similar legal and administrative proceedings that may result in a reduction in their scope or their loss altogether;
- we may not develop additional proprietary technologies or drug candidates that are patentable; or
- the patents of others may prevent us or our partners from discovering, developing or commercializing our drug candidates.

We may not be able to protect our intellectual property rights throughout the world. Patent protection is afforded on a country-by-country basis. Filing, prosecuting and defending patents on our product candidates in all countries throughout the world would be prohibitively expensive, and our intellectual property rights in some countries outside the United States can be less extensive than those in the United States. Many companies have encountered significant difficulties in protecting and defending intellectual property rights in foreign jurisdictions. Some of our development efforts are performed in countries outside of the United States through third-party contractors. We may not be able to effectively monitor and assess intellectual property developed by these contractors. We therefore may not be able to effectively protect this intellectual property and could lose potentially valuable intellectual property rights. In addition, the legal protection afforded to inventors and owners of intellectual property in countries outside of the United States may not be as protective of intellectual property rights as in the United States. Therefore, we may be unable to acquire and protect intellectual property developed by these contractors to the same extent as if these development activities were being conducted in the United States. If we encounter difficulties in protecting our intellectual property rights in foreign jurisdictions, our business prospects could be substantially harmed.

Patent terms may be inadequate to protect our competitive position on our technologies and drug candidates for an adequate amount of time. Patents have a limited lifespan. In the United States, if all maintenance fees are timely paid, the natural expiration of a patent is generally 20 years from its earliest U.S. non-provisional filing date. Various extensions may be available, but the life of a patent, and the protection it affords, is limited. Even if patents covering our technologies and drug candidates are obtained, once the patent life has expired, we may be open to competition from competitive products, including generics or biosimilars. Given the amount of time required for the development, testing and regulatory review of new drug candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. As a result, our owned, co-owned and licensed patent portfolio may not provide us with sufficient rights to exclude others from commercializing products similar or identical to ours or our partners.

Obtaining and maintaining our patent protection depends on compliance with various procedural, document submission, fee payment and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for non-compliance with these requirements. Periodic maintenance fees, renewal fees, annuity fees and various other governmental fees on patents and/or applications will be due to be paid to the USPTO and various governmental patent agencies outside of the United States in several stages over the lifetime of the patents and/or applications. Non-compliance could result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. In such an event, our competitors might be able to enter the market and this circumstance would have a material adverse effect on our business.

We may be subject to claims challenging the inventorship or ownership of our patents and other intellectual property. We rely on intellectual property assignment agreements with our corporate partners, employees, consultants, scientific advisors and other collaborators to grant us ownership of new intellectual property that is developed. These agreements may not result in the effective assignment to us of that intellectual property. As a result, our ownership of key intellectual property could be compromised.

We or our licensors may be subject to claims that former employees, collaborators, consultants or other third parties have an interest in our owned, co-owned or in-licensed patents, trade secrets, or other intellectual property as an inventor or co-inventor. For example, we or our licensors may have inventorship disputes arise from conflicting obligations of employees, collaborators, consultants or others who are involved in developing our product candidates. Litigation may be necessary to defend against these and other claims challenging inventorship or our or our licensors' ownership of our owned, co-owned or in-licensed patents, trade secrets or other intellectual property. If we or our licensors fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights, such as exclusive ownership of, or right to use, intellectual property that is important to

our product candidates. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees. Any of the foregoing could have a material adverse effect on our business, financial condition, results of operations and prospects.

We are a party to license agreements and may need to obtain additional licenses from others to advance our research and development activities or allow the commercialization of our drug candidates and future drug candidates we may identify and pursue. If we fail to comply with our obligations in the agreements under which we license intellectual property rights from third parties or these agreements are terminated or we otherwise experience disruptions to our business relationships with our licensors, we could lose intellectual property rights that are important to our business. Our licensors might conclude that we have materially breached our obligations under such license agreements and might therefore terminate, or seek to terminate, the license agreements, thereby removing or limiting our ability to develop and commercialize products and technology covered by these license agreements. If our license agreements are terminated, we may be required to cease our development and commercialization of our product candidates. Any of the foregoing could have a material adverse effect on our competitive position, business, financial conditions, results of operations and prospects. Moreover, disputes may arise regarding intellectual property subject to a licensing agreement. The resolution of any contract interpretation disagreement that may arise could narrow what we believe to be the scope of our rights to the relevant intellectual property or technology, or increase what we believe to be our financial or other obligations under the agreement, either of which could have a material adverse effect on our business, financial condition, results of operations and prospects. Moreover, if disputes over intellectual property that we have licensed prevent or impair our ability to maintain our current licensing arrangements on commercially acceptable terms, we may be unable to successfully develop and commercialize the affected product candidates. Any of the foregoing could have a material adverse effect on our competitive position, business, financial conditions, results of operations and prospects.

Changes in either the patent laws or their interpretation in the United States or other countries may diminish the value of our intellectual property or our ability to obtain patents. For example, the America Invents Act of 2011 may affect the scope, strength and enforceability of our patent rights in the United States or the nature of proceedings which may be brought by us related to our patent rights in the United States.

If one or more products resulting from our drug candidates is approved for sale by the FDA and we do not have adequate intellectual property protection for those products, competitors could duplicate them for approval and sale in the United States without repeating the extensive testing required of us or our partners to obtain FDA approval. Regardless of any patent protection, under current law, an application for a generic version of a new chemical entity cannot be approved until at least five years after the FDA has approved the original product. When that period expires, or if that period is altered, the FDA could approve a generic version of our product regardless of our patent protection. An applicant for a generic version of our product may only be required to conduct a relatively inexpensive study to show that its product is bioequivalent to our product, and may not have to repeat the lengthy and expensive clinical trials that we or our partners conducted to demonstrate that the product is safe and effective. In the absence of adequate patent protection for our products in other countries, competitors may similarly be able to obtain regulatory approval in those countries of generic versions of our products.

If we are unable to protect the confidentiality of our trade secrets, the value of our technology could be materially adversely affected and our business would be harmed.

We also rely on trade secrets to protect our technology, particularly where we believe patent protection is not appropriate or obtainable. However, trade secrets are often difficult to protect, especially outside of the United States. While we endeavor to use reasonable efforts to protect our trade secrets, our or our partners' employees, consultants, contractors or scientific and other advisors may unintentionally or willfully disclose our information to competitors. In addition, confidentiality agreements, if any, executed by those individuals may not be enforceable or provide meaningful protection for our trade secrets or other proprietary information in the event of unauthorized use or disclosure. We cannot be certain that such agreements have been entered into with all relevant parties, and we cannot be certain that our trade secrets and other confidential proprietary information will not be disclosed or that competitors will not otherwise gain access to our trade secrets or independently develop substantially equivalent information and techniques. Pursuing a claim that a third party had illegally obtained and was using our trade secrets would be expensive and time-consuming, and the outcome would be unpredictable. Even if we are able to maintain our trade secrets as confidential, if our competitors lawfully obtain or independently develop information equivalent or similar to our trade secrets, our business could be harmed.

If we are not able to defend the patent or trade secret protection position of our technologies and drug candidates, then we will not be able to exclude competitors from developing or marketing competing drugs, and we may not generate enough revenue from product sales to justify the cost of development of our drugs or to achieve or maintain profitability.

If we are sued for infringing third-party intellectual property rights, it will be costly and time-consuming, and an unfavorable outcome could have a significant adverse effect on our business.

Our ability to commercialize drugs depends on our ability to use, manufacture and sell those drugs without infringing the patents or other proprietary rights of third parties. Numerous U.S. and foreign issued patents and pending patent applications owned by third parties exist in the therapeutic areas in which we are developing drug candidates and seeking new potential drug candidates. In addition, because patent applications can take several years to issue, there may be currently pending applications, unknown to us, which could later result in issued patents that our activities with our drug candidates could infringe. There may also be existing patents, unknown to us, that our activities with our drug candidates could infringe.

Other future products of ours may be impacted by patents of companies engaged in competitive programs with significantly greater resources. Further development of these products could be impacted by these patents and result in significant legal fees.

If a third party claims that our actions infringe its patents or other proprietary rights, we could face a number of issues that could seriously harm our competitive position, including, but not limited to:

- infringement and other intellectual property claims that, even if meritless, can be costly and time-consuming to litigate, delay the regulatory approval process and divert management's attention from our core business operations;
- substantial damages for past infringement which we may have to pay if a court determines that our drugs or technologies infringe a third party's patent or other proprietary rights;
- a court prohibiting us from selling or licensing our drugs or technologies unless the holder licenses the patent or other proprietary rights to us, which it is not required to do; and
- if a license is available from a holder, we may have to pay substantial royalties or grant cross-licenses to our patents or other proprietary rights.

If any of these events occur, it could significantly harm our business and negatively affect our stock price.

We may undertake infringement or other legal proceedings against third parties, causing us to spend substantial resources on litigation and exposing our own intellectual property portfolio to challenge.

Third parties may infringe our patents. To prevent infringement or unauthorized use, we may need to file infringement suits, which are expensive and time-consuming. In an infringement proceeding, a court may decide that one or more of our patents is invalid, unenforceable, or both. In such case third parties may be able to use our technology without paying licensing fees or royalties. Even if the validity of our patents is upheld, a court may refuse to stop the other party from using the technology at issue on the ground that the other party's activities are not covered by our patents. Policing unauthorized use of our intellectual property is difficult, and we may not be able to prevent misappropriation of our proprietary rights, particularly in countries where the laws may not protect such rights as fully as in the United States. In addition, third parties may affirmatively challenge our rights to, or the scope or validity of, our patent rights.

The uncertainties associated with litigation could have a material adverse effect on our ability to raise the funds necessary to conduct clinical trials, continue our research programs, license necessary technology from third parties, or enter into development partnerships that would help us bring our drug candidates or other product candidates that we may identify to market. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. There could also be public announcements of the results of hearings, motions, or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a material adverse effect on the price of our common stock.

We may become involved in disputes with our strategic partners over intellectual property ownership, and publications by our research collaborators and clinical investigators could impair our ability to obtain patent protection or protect our proprietary information, either of which would have a significant impact on our business.

Inventions discovered under our current or future strategic alliance agreements may become jointly owned by our strategic partners and us in some cases, and the exclusive property of one of us in other cases. Under some circumstances, it may be difficult to determine who owns a particular invention or whether it is jointly owned, and disputes could arise regarding ownership or use of those inventions. These disputes could be costly and time-consuming, and an unfavorable outcome could have a significant adverse effect on our business if we were not able to protect or license rights to these inventions. In addition, our research collaborators and clinical investigators generally have contractual rights to publish data arising from their work. Publications by our research collaborators and clinical investigators relating to our research and development programs, either with or without our consent, could benefit our current or potential competitors and may impair our ability to obtain patent protection or protect our proprietary information, which could significantly harm our business.

We may be subject to claims that our employees, consultants or independent contractors have wrongfully used or disclosed confidential information of third parties or that we or our employees have wrongfully used or disclosed trade secrets of their former employers.

Many of our employees were previously employed at universities or other biotechnology or pharmaceutical companies, including our competitors or potential competitors. Although no legal proceedings against us are currently pending, we may be subject to claims that these employees or we have inadvertently or otherwise used or disclosed trade secrets or other proprietary information of their former employers. Litigation may be necessary to defend against these claims. If we fail in defending these claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel. A loss of key research personnel or their work product could hamper or prevent our ability to develop and commercialize certain potential drugs, which could significantly harm our business. Even if we are successful in defending against these claims, litigation could result in substantial costs and distract management.

Our competitors may develop drugs that are less expensive, safer or more effective than ours, which may diminish or eliminate the commercial success of any drugs that we may commercialize.

We compete with companies that have developed drugs or are developing drug candidates for cardiovascular diseases, diseases and conditions associated with muscle weakness or wasting and other diseases for which our drug candidates may be useful treatments. For example, if omecamtiv mecarbil is approved for marketing by the FDA or other regulatory authorities for the treatment of heart failure, it would compete against other drugs used for the treatment of acute and chronic heart failure. These include generic drugs, such as milrinone, dobutamine or digoxin and branded drugs such as Corlanor® (ivabradine), and Entresto® (sacubitril/valsartan). Omecamtiv mecarbil could also potentially compete against other novel drug candidates and therapies in development, such as those being developed by, but not limited to, Novartis AG, Merck & Co., Inc., Bayer AG, AstraZeneca PLC and MyoKardia, Inc. Omecamtiv mecarbil may also compete with currently approved products, such as in the SGLT2 class, that may expand their labels to include treatment of patients with heart failure, including Forxiga® (dapagliflozin), Invokana® (canagliflozin), and Jardiance® (empagliflozin). In addition, there are a number of medical devices both marketed and in development for the potential treatment of heart failure.

If reldesemtiv is approved for marketing by the FDA or other regulatory authorities for the treatment of ALS, it will then compete with RADICAVA™ (edaravone), the first FDA approved drug for the treatment of ALS since riluzole in 1995, and may then compete with other potential new therapies for ALS that are currently being developed by companies including, but not limited to, Alexion Pharmaceuticals, Inc., Orphazyme, NeuralStem, MediciNova, Ionis Pharmaceuticals, Inc. (in collaboration with Biogen Inc.), AB Sciences, Orion, Pharmaceuticals, Mitsubishi Tanabe Pharma Corporation, Treeway, Genentech, Inc., and BrainStorm Cell Therapeutics. Also, if reldesemtiv is approved by the FDA or other regulatory authorities for the treatment of SMA, it will then compete with SPINRAZA® (nusinersen) and Zolgensma® (onasemnogene abeparvovec-xioi) and may then compete with other potential new therapies being developed by companies including, but not limited to, F. Hoffman-La Roche Ltd. (in collaboration with PTC Therapeutics, Inc.). If reldesemtiv is approved by the FDA or other regulatory authorities for the treatment of non-neuromuscular indications associated with muscle weakness, it may then compete with other potential new therapies being developed by companies including, but not limited to, Regeneron Pharmaceuticals, Inc. (in collaboration with Sanofi), Eli Lilly and Company, Stealth BioTherapeutics, and Novartis (in collaboration with MorphoSys AG).

Our competitors may:

- develop drug candidates and market drugs that are less expensive or more effective than our future drugs;
- commercialize competing drugs before we or our partners can launch any drugs developed from our drug candidates;
- hold or obtain proprietary rights that could prevent us from commercializing our products;
- initiate or withstand substantial price competition more successfully than we can;
- more successfully recruit skilled scientific workers and management from the limited pool of available talent;
- more effectively negotiate third-party licenses and strategic alliances;
- take advantage of acquisition or other opportunities more readily than we can;
- develop drug candidates and market drugs that increase the levels of safety or efficacy that our drug candidates will need to show in order to obtain regulatory approval; or
- introduce therapies or market drugs that render the market opportunity for our potential drugs obsolete.

We will compete for market share against large pharmaceutical and biotechnology companies and smaller companies that are collaborating with larger pharmaceutical companies, new companies, academic institutions, government agencies and other public and private research organizations. Many of these competitors, either alone or together with their partners, may develop new drug candidates that will compete with ours. Many of these competitors have larger research and development programs or substantially greater financial resources than we do. Our competitors may also have significantly greater experience in:

- developing drug candidates;
- undertaking preclinical testing and clinical trials;
- building relationships with key customers and opinion-leading physicians;
- obtaining and maintaining FDA and other regulatory approvals of drug candidates;
- formulating and manufacturing drugs; and
- launching, marketing and selling drugs.

If our competitors market drugs that are less expensive, safer or more efficacious than our potential drugs, or that reach the market sooner than our potential drugs, we may not achieve commercial success. In addition, the life sciences industry is characterized by rapid technological change. If we fail to stay at the forefront of technological change, we may be unable to compete effectively. Our competitors may render our technologies obsolete by improving existing technological approaches or developing new or different approaches, potentially eliminating the advantages in our drug discovery process that we believe we derive from our research approach and proprietary technologies.

We have been granted orphan designation by the FDA and EMA for reldesemtiv for the potential treatment of SMA and ALS; however, there can be no guarantee that we will receive orphan approval for reldesemtiv, nor that we will be able to prevent third parties from developing and commercializing products that are competitive to reldesemtiv.

We have been granted orphan drug designation in the U.S. by the FDA for reldesemtiv for the potential treatment of SMA and the potential treatment of ALS. In the U.S., upon approval from the FDA of an NDA, products granted orphan drug designation are generally provided with seven years of marketing exclusivity in the U.S., meaning the FDA will generally not approve applications for other product candidates that contain the same active ingredient for the same orphan indication. Even if we are the first to obtain approval of an orphan product and are granted such exclusivity in the U.S., there are limited circumstances under which a later competitor product may be approved for the same indication during the seven-year period of marketing exclusivity, such as if the later product is shown to be clinically superior to our product or due to an inability to assure a sufficient quantity of the orphan drug.

EMA has granted orphan medicinal product designation to reldesemtiv for the potential treatment of SMA and the potential treatment of ALS. Orphan medicinal product status in the E.U. can provide up to 10 years of marketing exclusivity, meaning that another application for marketing authorization of a later similar medicinal product for the same therapeutic indication will generally not be approved in the E.U. Although we may have drug candidates that may obtain orphan drug exclusivity in Europe, the orphan approval and associated exclusivity period may be modified for several reasons, including a significant change to the orphan medicinal product designations or approval criteria after-market authorization of the orphan product (e.g., product profitability exceeds the criteria for orphan drug designation), problems with the production or supply of the orphan drug or a competitor drug, although similar, is safer, more effective or otherwise clinically superior than the initial orphan drug.

We are not guaranteed to maintain orphan status for reldesemtiv or to receive orphan status for reldesemtiv for any other indication or for any of our other drug candidates for any indication. If our drug candidates that are granted orphan status were to lose their status as orphan drugs or the marketing exclusivity provided for them in the U.S. or the E.U., our business and results of operations could be materially adversely affected. While orphan status for any of our products, if granted or maintained, would provide market exclusivity in the U.S. and the E.U. for the time periods specified above, we would not be able to exclude other companies from manufacturing and/or selling products using the same active ingredient for the same indication beyond the exclusivity period applicable to our product on the basis of orphan drug status. Moreover, we cannot guarantee that another company will not receive approval before we do of an orphan drug application in the U.S. or the E.U. for a product candidate that has the same active ingredient or is a similar medicinal product for the same indication as any of our drug candidates for which we plan to file for orphan designation and status. If that were to happen, our orphan drug applications for our drug candidate for that indication may not be approved until the competing company’s period of exclusivity has expired in the U.S. or the E.U., as applicable. Further, application of the orphan drug regulations in the U.S. and Europe is uncertain, and we cannot predict how the respective regulatory bodies will interpret and apply the regulations to our or our competitors’ products.

Our failure to attract and retain skilled personnel could impair our drug development, commercialization and financial reporting activities.

Our business depends on the performance of our senior management and key scientific and technical personnel. The loss of the services of any member of our senior management or key scientific, technical or financial reporting staff may significantly delay or prevent the achievement of drug development and other business objectives by diverting management's attention to transition matters and identifying suitable replacements. For example, our management concluded that our internal controls over financial reporting were not effective as of December 31, 2018 because an unremediated material weakness existed in our internal control over financial reporting related to employee turnover resulting in a temporary lack of resources in financial reporting roles with the appropriate skills to perform effective review during our financial statement close process. We also rely on consultants and advisors to assist us in formulating our research and development strategy. All of our consultants and advisors are either self-employed or employed by other organizations, and they may have conflicts of interest or other commitments, such as consulting or advisory contracts with other organizations, that may affect their ability to contribute to us. In addition, if and as our business grows, we will need to recruit additional executive management and scientific, technical and financial reporting personnel. There is intense competition for skilled executives and employees with relevant scientific and technical expertise, and this competition is likely to continue. Our inability to attract and retain sufficient scientific, technical and managerial personnel could limit or delay our product development activities, which would adversely affect the development of our drug candidates and commercialization of our potential drugs and growth of our business.

Any future workforce and expense reductions may have an adverse impact on our internal programs and our ability to hire and retain skilled personnel.

Our future success will depend in large part upon our ability to attract and retain highly skilled personnel. In light of our continued need for funding and cost control, we may be required to implement future workforce and expense reductions, which could further limit our research and development activities. We may have difficulty retaining and attracting such personnel as a result of a perceived risk of future workforce reductions. In addition, the implementation of any workforce or expense reduction programs may divert the efforts of our management team and other key employees, which could adversely affect our business.

We may expand our development and clinical research capabilities and, as a result, we may encounter difficulties in managing our growth, which could disrupt our operations.

We may have growth in our expenditures, the number of our employees and the scope of our operations, in particular with respect to those drug candidates that we elect to develop or commercialize independently or together with a partner. To manage our anticipated future growth, we must continue to implement and improve our managerial, operational and financial systems, expand our facilities and continue to recruit and train additional qualified personnel. Due to our limited resources, we may not be able to effectively manage the expansion of our operations or recruit and train additional qualified personnel. The physical expansion of our operations may lead to significant costs and may divert our management and business development resources. Any inability to manage growth could delay the execution of our business plans or disrupt our operations.

We currently have no sales or marketing capabilities and, if we are unable to enter into or maintain strategic alliances with marketing partners or to develop our own sales and marketing capabilities, we may not be successful in commercializing our potential drugs.

We currently have no sales, marketing or distribution capabilities. We plan to commercialize drugs that can be effectively marketed and sold in concentrated markets that do not require a large sales force to be competitive. To achieve this goal, we will need to establish our own specialized sales force and marketing organization with technical expertise and supporting distribution capabilities. Developing such an organization is expensive and time-consuming and could delay a product launch. In addition, we may not be able to develop this capacity efficiently, cost-effectively or at all, which could make us unable to commercialize our drugs. If we determine not to market our drugs on our own, we will depend on strategic alliances with third parties, such as Amgen and Astellas, which have established distribution systems and direct sales forces to commercialize them. If we are unable to enter into such arrangements on acceptable terms, we may not be able to successfully commercialize these drugs. To the extent that we are not successful in commercializing any drugs ourselves or through a strategic alliance, our product revenues and business will suffer and our stock price would decrease.

Our internal computer systems, or those of our CROs, CMOs, supply chain partners, collaboration partners or other contractors or consultants, may fail or suffer security breaches, which could result in a material disruption of our drug development programs.

Despite the implementation of security measures, our internal computer systems and those of our third-party CROs, CMOs, supply chain partners, collaboration partners and other contractors and consultants are vulnerable to damage from computer viruses, unauthorized access, natural disasters, terrorism, war and telecommunication and electrical failures. If such an event were to occur and cause interruptions in our operations, it could result in a material disruption of our drug development programs. For example, the loss of clinical study data from completed or ongoing clinical studies for any of our drug candidates could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. To the extent that any disruption or security breach were to result in a loss of or damage to our data or applications, or inappropriate disclosure of confidential or proprietary information, we could incur liability, our operations could be compromised and the further development of our product candidates could be delayed.

Significant disruptions of information technology systems or breaches of data security could adversely affect our business.

Our business is increasingly dependent on complex and interdependent information technology systems, including internet-based systems, databases and programs, to support our business processes as well as internal and external communications. As use of information technology systems has increased, deliberate attacks and attempts to gain unauthorized access to computer systems and networks have increased in frequency and sophistication. Our information technology, systems and networks are potentially vulnerable to breakdown, malicious intrusion and computer viruses which may result in the impairment of production and key business processes or loss of data or information. We are also potentially vulnerable to data security breaches—whether by employees or others—which may expose sensitive data to unauthorized persons. We have in the past and may in the future be subject to security breaches. For example, in February 2018, we discovered that our e-mail server suffered unauthorized intrusions in which proprietary business information was accessed. In addition, in December 2019, one of our employee's email account suffered an unauthorized intrusion, leading to the submission and inadvertent payment of a fraudulent invoice in the amount of approximately one hundred thousand dollars. Finally, in December 2019, our IT systems were exposed to a ransomware attack, which partially impaired certain IT systems for a short period of time. Although we do not believe that we have experienced any material losses related to security breaches, including in three recent email "phishing" incidents or the ransomware attack, there can be no assurance that we will not suffer such losses in the future. Breaches and other inappropriate access can be difficult to detect and any delay in identifying them could increase their harm. While we have implemented measures to protect our data security and information technology systems, such measures may not prevent these events. Any such breaches of security and inappropriate access could disrupt our operations, harm our reputation or otherwise have a material adverse effect on our business, financial condition and results of operations.

Our reported financial results may be adversely affected by changes in accounting principles generally accepted in the U.S.

We prepare our financial statements in conformity with accounting principles generally accepted in the U.S. These accounting principles are subject to interpretation by the FASB and the SEC. A change in these policies or interpretations could have a significant effect on our reported financial results, may retroactively affect previously reported results, could cause unexpected financial reporting fluctuations, and may require us to make costly changes to our operational processes and accounting systems.

We are a smaller reporting company, and any decision on our part to comply only with certain reduced reporting and disclosure requirements applicable to smaller reporting companies could make our common stock less attractive to investors.

We are a "smaller reporting company," as defined under the Exchange Act, in accordance with the amendments to such definition that became effective on September 10, 2018. For as long as we continue to be a smaller reporting company, we may choose to take advantage of exemptions from various reporting requirements applicable to other public companies that are not smaller reporting companies, including, but not limited to, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements. In addition, as a smaller reporting company, we are only required to include two years of audited financial statements in our annual reports. Investors could find our common stock less attractive if we choose to rely on these scaled disclosure requirements. If some investors find our common stock less attractive as a result of any choices to reduce future disclosure, there may be a less active trading market for our common stock and our stock price may be more volatile.

We will remain a "smaller reporting company" until (i) the market value of our common shares held by non-affiliates exceeds $250 million as of June 30 of any year; or (ii) either (a) our annual revenues exceed $100 million or (b) the market value of our common shares held by non-affiliates exceeds $700 million, as of June 30 of any year.

Our revenue to date has been primarily derived from our research and license agreements, which can result in significant fluctuation in our revenue from period to period, and our past revenue is therefore not necessarily indicative of our future revenue.

Our revenue is primarily derived from our research and license agreements, from which we receive upfront fees, contract research payments, milestone and other contingent payments based on clinical progress, regulatory progress or net sales achievements and royalties. Significant variations in the timing of receipt of cash payments and our recognition of revenue can result from significant payments based on the execution of new research and license agreements, the timing of clinical outcomes, regulatory approval, commercial launch or the achievement of certain annual sales thresholds. The amount of our revenue derived from research and license agreements in any given period will depend on a number of unpredictable factors, including our ability to find and maintain suitable collaboration partners, the timing of the negotiation and conclusion of collaboration agreements with such partners, whether and when we or our collaboration partners achieve clinical, regulatory and sales milestones, the timing of regulatory approvals in one or more major markets, reimbursement levels by private and government payers, and the market introduction of new drugs or generic versions of the approved drug, as well as other factors. Our past revenue generated from these agreements is not necessarily indicative of our future revenue. If any of our existing or future collaboration partners fails to develop, obtain regulatory approval for, manufacture or ultimately commercialize any product candidate under our collaboration agreement, our business, financial condition, and results of operations could be materially and adversely affected.

Indebtedness under our Term Loan agreement bears interest at variable interest rates based on LIBOR. Changes in the method of determining LIBOR, or the replacement of LIBOR with an alternative reference rate, may adversely affect interest rates on our current or future indebtedness and may otherwise adversely affect our financial condition and results of operations.

In July 2017, the Financial Conduct Authority, the authority that regulates LIBOR, announced that it intended to stop compelling banks to submit rates for the calculation of LIBOR after 2021. The Alternative Reference Rates Committee (“ARRC”) in the U.S. has proposed that the Secured Overnight Financing Rate (“SOFR”) is the rate that represents best practice as the alternative to the U.S. dollar LIBOR for use in derivatives and other financial contracts that are currently indexed to LIBOR. ARRC has proposed a paced market transition plan to SOFR from U.S. dollar LIBOR and organizations are currently working on industry-wide and company-specific transition plans as relating to derivatives and cash markets exposed to U.S. dollar LIBOR. We have certain financial contracts, including the Term Loan agreement, that are indexed to U.S. dollar LIBOR. Changes in the method of determining LIBOR, or the replacement of LIBOR with an alternative reference rate, may adversely affect interest rates on our current or future indebtedness. Any transition process may involve, among other things, increased volatility or illiquidity in markets for instruments that rely on LIBOR, reductions in the value of certain instruments or the effectiveness of related transactions such as hedges, increased borrowing costs, uncertainty under applicable documentation, or difficult and costly consent processes. We are monitoring this activity and evaluating the related risks, and any such effects of the transition away from LIBOR may result in increased expenses, may impair our ability to refinance our indebtedness or hedge our exposure to floating rate instruments, or may result in difficulties, complications or delays in connection with future financing efforts, any of which could adversely affect our financial condition and results of operations.

We may not be able to complete our relocation to our new facility as scheduled prior to expiry of the lease to our existing facility.

On July 24, 2019, we entered into a lease agreement with KR Oyster Point 1, LLC (the “Kilroy”), a subsidiary of Kilroy Realty Corporation, relating to the lease of approximately 234,892 square feet of office and laboratory space at a facility (currently under construction) located in South San Francisco, California (the “New Facility”). Kilroy is expected to deliver possession of the New Facility in the fourth quarter of 2021, while the lease (the “Current Lease”) to our existing facility at 280 E Grand Avenue, South San Francisco (the “Old Facility”) expires on June 30, 2021. In the event that the New Facility is not delivered to us in sufficient time to allow us to move our operations to the New Facility as anticipated, whether as a result of potential construction delays attributable to the COVID 19 pandemic or otherwise, we may be required to holdover the Old Facility past expiry of its term, leading to: (i) additional costs (including holdover rent at 150% of our current rent); (ii) liability under our indemnification obligations owed to our current landlord under the Current Lease; and (iii) disruption to our business.

Our business is currently adversely affected and could be materially and adversely affected in the future by the effects of disease outbreaks, epidemics and pandemics, including the ongoing COVID 19 pandemic. The COVID-19 pandemic continues to adversely impact our business and could materially and adversely affect our operations, as well as the businesses or operations of our or our partners, manufacturers, CROs or other third parties with whom we or our partners conduct business.

Disease outbreaks and epidemics in regions where we, our partners or other third parties on which we rely have manufacturing facilities, clinical trial sites or other important operations or pandemics such as the COVID-19 pandemic could adversely affect our business, including by causing significant disruptions in our operations and/or in the operations of third-party manufacturers and CROs upon whom we rely. For example, in March 2020, the World Health Organization declared the COVID-19 outbreak a pandemic, and the pandemic has presented a substantial public health and economic challenge around the world and is affecting employees, patients, communities and business operations, as well as the U.S. economy and financial markets. In this regard, the COVID-19 pandemic and government measures taken in response have had a significant impact, both direct and indirect, on business and commerce, as significant reductions in business-related activities have occurred, supply chains have been disrupted and manufacturing and clinical development activities have been curtailed or suspended.

Remote work policies, quarantines, shelter-in-place and similar governmental orders, shutdowns or other restrictions on the conduct of business operations related to the COVID-19 pandemic could materially and adversely affect our operations. Based on guidance issued by federal, state and local authorities, we have implemented a voluntary work-from-home policies for our employees. The effects of the safer community order and our work-from-home and voluntary work-on-site policies may negatively impact productivity, disrupt our, or our partners to which we rely, business and delay clinical programs and timelines, the magnitude of which will depend, in part, on the length and severity of the restrictions and other limitations on the ability to conduct business in the ordinary course. In connection with these measures, we may be subject to claims based upon, arising out of, or related to COVID-19 and our actions and responses thereto, including any determinations that we have made and may in the future make with respect to our onsite operations. These and similar, and perhaps more severe, disruptions in operations could negatively impact our business, operating results and financial condition.

In addition, our clinical trials or those conducted by our partner, Amgen, may continue to be adversely affected by the COVID-19 pandemic. Clinical site initiation, conduct, and patient enrollment has been and may continue to be delayed due to prioritization of medical resources toward the COVID-19 pandemic and restrictions on the ability to travel. It may not be possible to carry out some aspects of clinical trial protocols if quarantines or other restrictions impede patient movement or interrupt healthcare services. It may be necessary to suspend enrollment at some or all clinical trial sites to comply with shelter in place orders, and to reduce the risk to patients, their caretakers, and healthcare providers from contracting COVID-19. Patients may be forced to quarantine or comply with shelter-in-place orders or may refuse home healthcare visits, particularly in medically vulnerable patient populations. Similarly, principal investigators and site staff who, as healthcare providers, may have heightened exposure to COVID-19 but also may be pulled into clinical care and away from clinical research, may adversely impact our or our partner's clinical trial operations. Further, our clinical trial patients who contract COVID-19 may (i) experience unexpected adverse medical events that could be wrongfully attributable to our investigational drugs, and (ii) experience endpoint events because of COVID-19 that could confound the interpretation of data and results relating to our investigational drugs arising from our clinical trials. Other key clinical trial activities, such as clinical trial site data monitoring and site inspections, may also be adversely affected due to limitations on travel imposed or recommended by governmental authorities, which may impact the integrity of subject data and clinical study endpoints. Finally, disruptions in our supply chain due to loss of the ability of sites to dispense study drug, travel and import/export restrictions or lack of raw materials may result in an interruption, or delays in receiving, supplies of our drug candidates from our contract manufacturing organizations or study sites, which in turn may also adversely affect our clinical trials.

The spread of COVID-19, which has caused a broad impact globally, may materially affect us economically. While the potential economic impact brought by, and the duration of, COVID-19 may be difficult to assess or predict, a widespread pandemic could result in significant disruption of global financial markets, reducing our ability to access capital, which could in the future negatively affect our liquidity. In addition, a recession or market correction resulting from the spread of COVID-19 could materially affect our business and the value of our common stock.

The global pandemic of COVID-19 continues to rapidly evolve. The ultimate impact of the COVID-19 pandemic or a similar health epidemic is highly uncertain and subject to change. We do not yet know the full extent of potential delays or impacts on our business, our clinical trials, healthcare systems or the global economy as a whole. However, these effects could have a material impact on our operations, and we will continue to monitor the COVID-19 situation closely.

Risks Related to Our Industry

The regulatory approval process is expensive, time-consuming and uncertain and may prevent our partners or us from obtaining approvals to commercialize some or all of our drug candidates.

The research, testing, manufacturing, selling and marketing of drugs are subject to extensive regulation by the FDA and other regulatory authorities in the United States and other countries, and regulations differ from country to country. Neither we nor our partners are permitted to market our potential drugs in the United States until we receive approval of a new drug application ("NDA") from the FDA. Neither we nor our partners have received NDA or other marketing approval for any of our drug candidates.

Obtaining NDA approval is a lengthy, expensive and uncertain process. In addition, failure to comply with FDA and other applicable foreign and U.S. regulatory requirements may subject us to administrative or judicially imposed sanctions. These include warning letters, civil and criminal penalties, injunctions, product seizure or detention, product recalls, total or partial suspension of production, and refusal to approve pending NDAs or supplements to approved NDAs.

Regulatory approval of an NDA or NDA supplement is never guaranteed, and the approval process typically takes several years and is extremely expensive. The FDA and foreign regulatory agencies also have substantial discretion in the drug approval process, and the guidance and advice issued by such agencies is subject to change at any time. Despite the time and efforts exerted, failure can occur at any stage, and we may encounter problems that cause us to abandon clinical trials or to repeat or perform additional preclinical testing and clinical trials. The number and focus of preclinical studies and clinical trials that will be required for approval by the FDA and foreign regulatory agencies varies depending on the drug candidate, the disease or condition that the drug candidate is designed to address, and the regulations applicable to any particular drug candidate. In addition, the FDA may require that a proposed Risk Evaluation and Mitigation Strategy ("REMS") be submitted as part of an NDA if the FDA determines that it is necessary to ensure that the benefits of the drug outweigh its risks. The FDA and foreign regulatory agencies can delay, limit or deny approval of a drug candidate for many reasons, including, but not limited to:

- they might determine that a drug candidate is not safe or effective;
- they might not find the data from non-clinical testing and clinical trials sufficient and could request that additional trials be performed;
- they might not approve our, our partner's or the contract manufacturer's processes or facilities; or
- they might change their approval policies or adopt new regulations.

Even if we receive regulatory approval to manufacture and sell a drug in a particular regulatory jurisdiction, other jurisdictions' regulatory authorities may not approve that drug for manufacture and sale. If we or our partners fail to receive and maintain regulatory approval for the sale of any drugs resulting from our drug candidates, it would significantly harm our business and negatively affect our stock price.

If we or our partners receive regulatory approval for our drug candidates, we or they will be subject to ongoing obligations to and continued regulatory review by the FDA and foreign regulatory agencies, and may be subject to additional post-marketing obligations, all of which may result in significant expense and limit commercialization of our potential drugs.

Any regulatory approvals that we or our partners receive for our drug candidates may be subject to limitations on the indicated uses for which the drug may be marketed or require potentially costly post-marketing follow-up studies or compliance with a REMS. In addition, if the FDA or foreign regulatory agencies approves any of our drug candidates, the labeling, packaging, adverse event reporting, storage, advertising, promotion and record-keeping for the drug will be subject to extensive regulatory requirements. The subsequent discovery of previously unknown problems with the drug, including adverse events of unanticipated severity or frequency, or the discovery that adverse events or toxicities observed in preclinical research or clinical trials that were believed to be minor constitute much more serious problems, may result in restrictions on the marketing of the drug or withdrawal of the drug from the market.

The FDA and foreign regulatory agencies may change their policies and additional government regulations may be enacted that could prevent or delay regulatory approval of our drug candidates. We cannot predict the likelihood, nature or extent of adverse government regulation that may arise from future legislation or administrative action, either in the United States or abroad. If we are not able to maintain regulatory compliance, we might not be permitted to market our drugs and our business would suffer.

If physicians and patients do not accept our drugs, we may be unable to generate significant revenue, if any.

Even if our drug candidates obtain regulatory approval, the resulting drugs, if any, may not gain market acceptance among physicians, healthcare payors, patients and the medical community. Even if the clinical safety and efficacy of drugs developed from our drug candidates are established for purposes of approval, physicians may elect not to recommend these drugs for a variety of reasons including, but not limited to:

- introduction of competitive drugs to the market;
- clinical safety and efficacy of alternative drugs or treatments;
- cost-effectiveness;
- availability of coverage and reimbursement from health maintenance organizations and other third-party payors;
- convenience and ease of administration;
- prevalence and severity of adverse events;
- other potential disadvantages relative to alternative treatment methods; or
- insufficient marketing and distribution support.

If our drugs fail to achieve market acceptance, we may not be able to generate significant revenue and our business would suffer.

The commercial success of our products depends on the availability and sufficiency of third-party payor coverage and reimbursement.

Patients in the United States and elsewhere generally rely on third-party payors to reimburse part or all of the costs associated with their prescription drugs. Accordingly, market acceptance of our products is dependent on the extent to which third-party coverage and reimbursement is available from government health administration authorities (including in connection with government healthcare programs, such as Medicare and Medicaid in the United States), private healthcare insurers and other healthcare funding organizations. Significant uncertainty exists as to the coverage and reimbursement status of any products for which we may obtain regulatory approval. Even if we obtain coverage for a given drug product, the associated reimbursement rate may not be adequate to cover our costs, including research, development, intellectual property, manufacture, sale and distribution expenses, or may require co-payments that patients find unacceptably high.

Coverage and reimbursement policies for drug products can differ significantly from payor to payor as there is no uniform policy of coverage and reimbursement for drug products among third-party payors in the United States. There may be significant delays in obtaining coverage and reimbursement as the process of determining coverage and reimbursement is often time-consuming and costly which will require us to provide scientific and clinical support for the use of our products to each payor separately, with no assurance that coverage or adequate reimbursement will be obtained. It is difficult to predict at this time what third-party will decide with respect to coverage and reimbursement for our products.

In addition, we expect that increased emphasis on cost containment measures in the United States by third-party payors to continue and will place pressure on pharmaceutical pricing and coverage. If we are unable to obtain and maintain sufficient third-party coverage and adequate reimbursement for our products, the commercial success of our drug products may be greatly hindered and our financial condition and results of operations may be materially and adversely affected.

Recently enacted and future legislation, including potentially unfavorable pricing regulations or other healthcare reform initiatives, may increase the difficulty and cost for us to obtain regulatory approval of and commercialize our product candidates and affect the prices we may obtain.

The regulations that govern, among other things, regulatory approvals, coverage, pricing and reimbursement for new drug products vary widely from country to country. In the United States and some foreign jurisdictions, there have been a number of legislative and regulatory changes and proposed changes regarding the healthcare system that could prevent or delay regulatory approval of our product candidates, restrict or regulate post-approval activities and affect our ability to successfully sell any product candidates for which we obtain regulatory approval. In particular, in March 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act (collectively, the “ACA”) was enacted, which substantially changes the way health care is financed by both governmental and private insurers, and significantly impacts the U.S. pharmaceutical industry. The ACA and its implementing regulations, among other things, addressed a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for certain drugs and biologics, including our product

candidates that are inhaled, infused, instilled, implanted or injected, increased the minimum Medicaid rebates owed by manufacturers under the Medicaid Drug Rebate Program, extended the Medicaid Drug Rebate Program to utilization of prescriptions of individuals enrolled in Medicaid managed care organizations, subjected manufacturers to new annual fees and taxes for certain branded prescription drugs, provided incentives to programs that increase the federal government's comparative effectiveness research and established a new Medicare Part D coverage gap discount program.

Other legislative changes have been proposed and adopted in the United States since the ACA was enacted. In August 2011, the Budget Control Act of 2011, among other things, created measures for spending reductions by the U.S. Congress. A Joint Select Committee on Deficit Reduction, tasked with recommending a targeted deficit reduction of at least $1.2 trillion for the years 2013 through 2021, was unable to reach required goals, thereby triggering the legislation's automatic reduction to several government programs. This includes aggregate reductions of Medicare payments to providers of 2% per fiscal year, which went into effect in April 2013, and, due to subsequent legislative amendments, will remain in effect through 2029 unless additional Congressional action is taken. In January 2013, the American Taxpayer Relief Act of 2012 was enacted which, among other things, further reduced Medicare payments to several providers, including hospitals and outpatient clinics, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years.

Since its enactment, there have been judicial and Congressional challenges to numerous elements of the ACA, as well as efforts by both the executive and legislative branches of the federal government to repeal or replace certain aspects of the ACA. For example, the President signed Executive Orders designed to delay the implementation of certain provisions of the ACA or otherwise circumvent some of the requirements for health insurance mandated by the ACA. In addition, the U.S. Congress has considered legislation that would repeal or repeal and replace all or part of the ACA. While the U.S. Congress has not passed comprehensive repeal legislation, it has enacted laws that modify certain provisions of the ACA, such as removing penalties, starting January 1, 2019, for not complying with the ACA's individual mandate to carry health insurance, eliminating the implementation of certain mandated fees, and increasing the point-of-sale discount that is owed by pharmaceutical manufacturers who participate in Medicare Part D. In December 2018, a Texas U.S. District Court Judge ruled that the ACA is unconstitutional in its entirety because the "individual mandate" was repealed by Congress as part of the Tax Cuts and Jobs Act of 2017, or the Tax Act. Additionally, on December 18, 2019, the U.S. Court of Appeals for the 5th Circuit upheld the District Court ruling that the individual mandate was unconstitutional and remanded the case back to the District Court to determine whether the remaining provisions of the ACA are invalid as well. It is unclear how this decision, subsequent appeals, and other efforts to repeal and replace the ACA will impact the ACA and our business. The U.S. Congress may consider and adopt other legislation to repeal and replace all or certain elements of the ACA. Any other executive, legislative or judicial action to "repeal and replace" all or part of the ACA may have the effect of limiting the amounts that government agencies will pay for healthcare products and services, which could result in reduced demand for our products or additional pricing pressure, or may lead to significant deregulation, which could make the introduction of competing products and technologies much easier. Policy changes, including potential modification or repeal of all or parts of the ACA or the implementation of new health care legislation, could result in significant changes to the health care system which may adversely affect our business in unpredictable ways.

There have been, and likely will continue to be, legislative and regulatory proposals at the foreign, federal and state levels directed at broadening the availability of healthcare and containing or lowering the cost of healthcare. We cannot predict the initiatives that may be adopted in the future. The continuing efforts of governments, insurance companies, managed care organizations and other payors of healthcare services to contain or reduce costs of healthcare, including by imposing price controls, may adversely affect the demand for our product candidates for which we obtain regulatory approval and our ability to set a price that we believe is fair for our products. Any reduction in reimbursement from Medicare or other government programs may result in a similar reduction in payments from private payors.

Legislative and regulatory proposals have been made to expand post-approval requirements and restrict sales and promotional activities for pharmaceutical products. We cannot be sure whether additional legislative changes will be enacted, or whether the FDA or foreign regulations, guidance or interpretations will be changed, or what the impact of these changes on the regulatory approvals of our product candidates, if any, may be. In the United States, the E.U. and other potentially significant markets for our product candidates, government authorities and third-party payors are increasingly attempting to limit or regulate the price of medical products and services, particularly for new and innovative products and therapies, which has resulted in lower average selling prices. For example, in the United States, there have been several recent Congressional inquiries and proposed and enacted federal and state legislation designed to, among other things, bring more transparency to drug pricing, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for drugs. At the federal level, the U.S. presidential administration's budget proposal for fiscal year 2020 contained further drug price control measures that could be enacted during the budget process or in other future legislation, including, for example, measures to permit Medicare Part D plans to negotiate the price of certain drugs under Medicare Part B, to allow some states to negotiate drug prices under Medicaid, and to eliminate cost sharing for generic drugs for low-income patients. Additionally, in May 2018, the U.S. presidential administration laid

out a “Blueprint” to lower drug prices and reduce out of pocket costs of drugs that contains additional proposals to increase manufacturer competition, increase the negotiating power of certain federal healthcare programs, incentivize manufacturers to lower the list price of their products and reduce the out of pocket costs of drug products paid by consumers. The U.S. Department of Health and Human Services (“HHS”) has solicited feedback on some of these measures implemented others under its existing authority. For example, in May 2019, CMS issued a final rule to allow Medicare Advantage plans the option to use step therapy for Part B drugs beginning January 1, 2020. This final rule codified CMS’s policy change that was effective January 1, 2019. Although some of these and other measures may require additional authorization to become effective, members of Congress and the U.S. presidential administration have indicated that they will continue to seek new legislative or administrative measures to control drug costs. At the state level, legislatures have increasingly passed legislation and implemented regulations designed to control pharmaceutical and biological product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, to encourage importation from other countries and bulk purchasing. Furthermore, the increased emphasis on managed healthcare in the United States and on country and regional pricing and reimbursement controls in the E.U. will put additional pressure on product pricing, reimbursement and usage, which may adversely affect our future product sales. These pressures can arise from rules and practices of managed care groups, judicial decisions and governmental laws and regulations related to Medicare, Medicaid and healthcare reform, pharmaceutical reimbursement policies and pricing in general.

In addition, there is significant uncertainty regarding the reimbursement status of newly approved healthcare products. We may need to conduct expensive pharmacoeconomic studies in order to demonstrate the cost-effectiveness of our products. If third-party payors do not consider our products to be cost-effective compared to other therapies, the payors may not cover our products after approved as a benefit under their plans or, if they do, the level of payment may not be sufficient to allow us to sell our products on a profitable basis.

We may be subject to costly product liability or other liability claims and may not be able to obtain adequate insurance.

The use of our drug candidates in clinical trials may result in adverse events. We cannot predict all the possible harms or adverse events that may result from our clinical trials. We currently maintain limited product liability insurance. We may not have sufficient resources to pay for any liabilities resulting from a personal injury or other claim excluded from, or beyond the limit of, our insurance coverage. Our insurance does not cover third parties’ negligence or malpractice, and our clinical investigators and sites may have inadequate insurance or none at all. In addition, in order to conduct clinical trials or otherwise carry out our business, we may have to contractually assume liabilities for which we may not be insured. If we are unable to look to our own insurance or a third party’s insurance to pay claims against us, we may have to pay any arising costs and damages ourselves, which may be substantial.

In addition, if we commercially launch drugs based on our drug candidates, we will face even greater exposure to product liability claims. This risk exists even with respect to those drugs that are approved for commercial sale by the FDA and foreign regulatory agencies and manufactured in licensed and regulated facilities. We intend to secure additional limited product liability insurance coverage for drugs that we commercialize, but may not be able to obtain such insurance on acceptable terms with adequate coverage, or at reasonable costs. Even if we are ultimately successful in product liability litigation, the litigation would consume substantial amounts of our financial and managerial resources and may create adverse publicity, all of which would impair our ability to generate sales of the affected product and our other potential drugs. Moreover, product recalls may be issued at our discretion or at the direction of the FDA and foreign regulatory agencies, other governmental agencies or companies having regulatory control for drug sales. Product recalls are generally expensive and often have an adverse effect on the reputation of the drugs being recalled and of the drug’s developer or manufacturer.

We may be required to indemnify third parties against damages and other liabilities arising out of our development, commercialization and other business activities, which could be costly and time-consuming and distract management. If third parties that have agreed to indemnify us against damages and other liabilities arising from their activities do not fulfill their obligations, then we may be held responsible for those damages and other liabilities.

Our relationships with customers, healthcare providers, clinical trial sites and professionals and third-party payors will be subject to applicable anti-kickback, fraud and abuse and other laws and regulations. If we fail to comply with federal, state and foreign laws and regulations, including healthcare, privacy and data security laws and regulations, we could face criminal sanctions, civil penalties, contractual damages, reputational harm and diminished profits and future earnings.

Healthcare providers, physicians and third-party payors play a primary role in the recommendation and prescription of any drug candidates for which we may obtain marketing approval. Our arrangements with customers, healthcare providers and professionals and third-party payors may expose us to broadly applicable fraud and abuse and other healthcare laws and regulations that may constrain the business or financial arrangements and relationships through which we develop, and may market, sell and distribute, our products for which we obtain marketing approval. Restrictions under applicable federal and state healthcare laws and regulations, include, but are not limited to, the following:

- The federal healthcare anti-kickback statute prohibits, among other things, persons from knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in cash or in kind, to induce or reward either the referral of an individual for, or the purchase, order or recommendation of, any good or service, for which payment may be made under federally funded healthcare programs such as Medicare and Medicaid. This statute has been broadly interpreted to apply to manufacturer arrangements with prescribers, purchasers and formulary managers, among others. Several other countries, including the United Kingdom, have enacted similar anti-kickback, fraud and abuse, and healthcare laws and regulations.
- The federal false claims laws, including the False Claims Act, which can be enforced through whistleblower or qui tam actions, imposes penalties against individuals or entities for knowingly presenting, or causing to be presented, to the federal government, claims for payment that are false or fraudulent or making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government. The government and qui tam relators have brought False Claims Act actions against pharmaceutical companies on the theory that their practices have caused false claims to be submitted to the government.
- The federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, imposes criminal and civil liability for executing a scheme to defraud any healthcare benefit program. HIPAA also imposes obligations, including mandatory contractual terms, with respect to safeguarding the privacy, security and transmission of individually identifiable health information. HIPAA also imposes criminal liability for knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false statement in connection with the delivery of or payment for healthcare benefits, items or services.
- The federal Physician Payments Sunshine Act requires manufacturers of drugs, devices, biologics and medical supplies to report to the HHS information related to payments and other transfers of value made to or at the request of covered recipients, such as physicians, as defined by such law, and teaching hospitals, and physician ownership and investment interests in such manufacturers. Payments made to physicians and research institutions for clinical trials are included within the ambit of this law.
- Analogous state laws and regulations, such as state anti-kickback and false claims laws, may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third-party payors, including private insurers, and some state laws require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government in addition to requiring drug manufacturers to report information related to payments to physicians and other health care providers or marketing expenditures and state and local laws that require the registration of sales representatives.

Efforts to ensure that our business arrangements with third parties will comply with applicable healthcare laws and regulations will involve substantial costs. It is possible that governmental authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law involving applicable fraud and abuse or other healthcare laws and regulations. If our operations are found to be in violation of any of these laws or any other governmental regulations that may apply to us, we may be subject to significant civil, criminal and administrative penalties, damages, fines, exclusion from government funded healthcare programs, such as Medicare and Medicaid, and the curtailment or restructuring of our operations. Exclusion, suspension and debarment from government funded healthcare programs would significantly impact our ability to commercialize, sell or distribute any drug. If any of the physicians or other providers or entities with whom we expect to do business are found to be not in compliance with applicable laws, they may be subject to criminal, civil or administrative sanctions, including exclusions from government funded healthcare programs.

The collection, use, disclosure, transfer, or other processing of personal data regarding individuals in the E.U., including personal health data, is subject to the E.U. General Data Protection Regulation (the "GDPR"), which became effective in May 2018. The GDPR, which is wide-ranging in scope, imposes several requirements relating to the control over personal data by individuals to

whom the personal data relates, the information provided to the individuals, the documentation we must maintain, the security and confidentiality of the personal data, data breach notification and the use of third-party processors in connection with the processing of personal data. The GDPR also imposes strict rules on the transfer of personal data out of the E.U., provides an enforcement authority and authorizes the imposition of large penalties for noncompliance, including the potential for fines of up to €20 million or 4% of the annual global revenues of the non-compliant company, whichever is greater. The GDPR has increased our responsibility and potential liability in relation to personal data that we process compared to prior E.U. law, and we may be required to put in place additional mechanisms to ensure compliance with the GDPR, which could divert management's attention and increase our cost of doing business. However, despite our ongoing efforts to bring our practices into compliance with the GDPR, we may not be successful either due to various factors within our control or other factors outside our control. It is also possible that local data protection authorities may have different interpretations of the GDPR, leading to potential inconsistencies amongst various E.U. Member States. Any failure or alleged failure (including as a result of deficiencies in our policies, procedures or measures relating to privacy, data security, marketing or communications) by us to comply with laws, regulations, policies, legal or contractual obligations, industry standards or regulatory guidance relating to privacy or data security, may result in governmental investigations and enforcement actions, litigation, fines and penalties or adverse publicity. In addition, new regulation, legislative actions or changes in interpretation of existing laws or regulations regarding data privacy and security (together with applicable industry standards) may increase our costs of doing business. We expect that there will continue to be new proposed laws, regulations and industry standards relating to privacy and data protection in the United States, the E.U. and other jurisdictions, such as the California Consumer Privacy Act of 2018 that went into effect as of January 1, 2020, and we cannot determine the impact such future laws, regulations and standards will have on our business.

Comprehensive U.S. tax reform legislation could increase the tax burden on our orphan drug programs and adversely affect our business and financial condition.

The U.S. government enacted comprehensive tax legislation in 2017 (the "2017 Tax Act") that includes significant changes to the taxation of business entities. These changes include, among others, (i) a permanent reduction to the corporate income tax rate, (ii) a partial limitation on the deductibility of business interest expense and net operating loss carryforwards, (iii) a shift of the U.S. taxation of multinational corporations from a tax on worldwide income to a territorial system (along with certain rules designed to prevent erosion of the U.S. income tax base) and (iv) a one-time tax on accumulated offshore earnings held in cash and illiquid assets, with the latter taxed at a lower rate. Further, the comprehensive tax legislation, among other things, reduces the orphan drug tax credit from 50% to 25% of qualifying expenditures. When and if we become profitable, this reduction in tax credits may result in an increased federal income tax burden on our orphan drug programs as it may cause us to pay federal income taxes earlier under the revised tax law than under the prior law and, despite being partially off-set by a reduction in the corporate tax rate from a top marginal rate of 35% to a flat rate of 21%, may increase our total federal tax liability attributable to such programs.

Notwithstanding the reduction in the corporate income tax rate, the overall impact of this comprehensive tax legislation resulted in an overall reduction in our deferred tax assets, and our business and financial condition could still be adversely affected as additional guidance and regulations are issued with respect to the original tax law change. In addition, it is uncertain if and to what extent various states will conform to this comprehensive tax legislation. The impact of this comprehensive tax legislation on holders of our common stock is also uncertain and could be adverse. Investors should consult with their legal and tax advisors with respect to this comprehensive tax legislation and the potential tax consequences of investing in or holding our common stock.

The withdrawal of the United Kingdom (the "U.K.") from the E.U., commonly referred to as "Brexit," may adversely impact our ability to obtain regulatory approvals of our product candidates in the U.K., result in restrictions or imposition of taxes and duties for importing our product candidates into the U.K. from the E.U., and may require us to incur additional expenses in order to develop, manufacture and commercialize our product candidates in the U.K.

Following the result of a referendum in 2016, the U.K. left the E.U. on January 31, 2020, commonly referred to as Brexit. Pursuant to the formal withdrawal arrangements agreed between the U.K. and the E.U., the U.K. will be subject to a transition period until December 31, 2020, or the Transition Period, during which E.U. rules will continue to apply. Negotiations between the U.K. and the E.U. are expected to continue in relation to the customs and trading relationship between the U.K. and the E.U. following the expiry of the Transition Period.

Since a significant proportion of the regulatory framework in the U.K. applicable to our business and our product candidates is derived from E.U. directives and regulations, Brexit, following the Transition Period, could materially impact the regulatory regime with respect to the development, manufacture, importation, approval and commercialization of our product candidates in the U.K. Following the Transition Period, the U.K. will no longer be covered by the centralized procedures for obtaining E.U-wide marketing authorization from the EMA and, unless a specific agreement is entered into, a separate process for authorization of drug products, including our product candidates, will be required in the U.K., the potential process for which is currently unclear. Any delay in obtaining, or an inability to obtain, any marketing approvals, as a result of Brexit or otherwise, would prevent us from commercializing our product candidates in the U.K. and restrict our ability to generate revenue and achieve and sustain profitability.

In addition, we may be required to pay or be required to pay higher taxes or duties or be subjected to other hurdles in connection with the importation of our product candidates into the U.K. from the E.U. or elsewhere, if any of our product candidates are manufactured in the E.U. or elsewhere, and we may incur expenses in establishing a manufacturing facility in the U.K. in order to circumvent such hurdles. If any of these outcomes occur, we may be forced to restrict or delay efforts to seek regulatory approval in the U.K. for our product candidates, or incur significant additional expenses to operate our business, which could significantly and materially harm or delay our ability to generate revenues or achieve profitability of our business.

Our ability to use net operating loss carryforwards and tax credit carryforwards to offset future taxable income may be subject to certain limitations, and ownership changes may limit our ability to use our net operating losses and tax credits in the future.

Our ability to use our federal and state net operating loss carryforwards ("NOLs") to offset potential future taxable income and reduce related income taxes depends upon our generation of future taxable income. We cannot predict with certainty when, or whether, we will generate sufficient taxable income to use our NOLs.

Our federal NOLs generated prior to 2018 will continue to be governed by tax rules in effect prior to the 2017 Tax Act, with unused NOLs expiring 20 years after we report a tax loss. These NOLs could expire unused and be unavailable to offset future taxable income. We cannot predict if and to what extent various states will conform to the 2017 Tax Act.

In addition, generally, if one or more stockholders or groups of stockholders who owns at least 5% of stock increases its ownership by more than 50% over its lowest ownership percentage within a three-year testing period, an ownership change occurs (an "Ownership Change"). Our ability to utilize our NOLs and tax credit carryforwards to reduce taxes payable in a year we have taxable income may be limited if there has been an Ownership Change in our stock. Similar rules may apply under state tax laws. We may experience Ownership Changes in the future as a result of future stock sales or other changes in the ownership of our stock, some of which are beyond our control and, as a result, NOLs generated in 2017 and before, may expire unused.

Any material limitation or expiration of our NOLs and tax credit carryforwards may harm our future net income by effectively increasing our future effective tax rate, which could result in a reduction in the market price of our common stock.

Responding to any claims relating to improper handling, storage or disposal of the hazardous chemicals and radioactive and biological materials we use in our business could be time-consuming and costly.

Our research and development processes involve the controlled use of hazardous materials, including chemicals and radioactive and biological materials. Our operations produce hazardous waste products. We cannot eliminate the risk of accidental contamination or discharge and any resultant injury from those materials. Federal, state and local laws and regulations govern the use, manufacture, storage, handling and disposal of hazardous materials. We may be sued for any injury or contamination that results from our or third parties' use of these materials. Compliance with environmental laws and regulations is expensive, and current or future environmental regulations may impair our research, development and production activities.

Our facilities in California are located near an earthquake fault, and an earthquake or other types of natural disasters, catastrophic events or resource shortages could disrupt our operations and adversely affect our results.

All our facilities and our important documents and records, such as hard and electronic copies of our laboratory books and records for our drug candidates and compounds and our electronic business records, are located in our corporate headquarters at a single location in South San Francisco, California near active earthquake zones. If a natural disaster, such as an earthquake, fire or flood, a catastrophic event such as a disease pandemic or terrorist attack, or a localized extended outage of critical utilities or transportation systems occurs, we could experience a significant business interruption. Our partners and other third parties on which we rely may also be subject to business interruptions from such events. In addition, California from time to time has experienced shortages of water, electric power and natural gas. Future shortages and conservation measures could disrupt our operations and cause expense, thus adversely affecting our business and financial results.

Risks Related to an Investment in Our Common Stock

We expect that our stock price will fluctuate significantly, and you may not be able to resell your shares at or at or above your investment price.

The stock market, particularly in recent years, has experienced significant volatility, particularly with respect to pharmaceutical, biotechnology and other life sciences company stocks, which often does not relate to the operating performance of the companies represented by the stock. Factors that could cause volatility in the market price of our common stock include, but are not limited to:

- announcements concerning any of the clinical trials for our drug candidates (including, but not limited to, the timing of initiation or completion of such trials and the results of such trials, and delays or discontinuations of such trials, including delays resulting from slower than expected or suspended patient enrollment or discontinuations resulting from a failure to meet pre-defined clinical end points);

- announcements concerning our strategic alliance with Amgen, Astellas or Ji Xing or future strategic alliances;
- failure or delays in entering additional drug candidates into clinical trials;
- failure or discontinuation of any of our research programs;
- issuance of new or changed securities analysts' reports or recommendations;
- failure or delay in establishing new strategic alliances, or the terms of those alliances;
- market conditions in the pharmaceutical, biotechnology and other healthcare-related sectors;
- actual or anticipated fluctuations in our quarterly financial and operating results;
- developments or disputes concerning our intellectual property or other proprietary rights;
- introduction of technological innovations or new products by us or our competitors;
- issues in manufacturing, packaging, labeling and distribution of our drug candidates or drugs;
- market acceptance of our drugs;
- third-party healthcare coverage and reimbursement policies;
- FDA or other U.S. or foreign regulatory actions affecting us or our industry;
- litigation or public concern about the safety of our drug candidates or drugs;
- additions or departures of key personnel;
- substantial sales of our common stock by our existing stockholders, whether or not related to our performance;
- automated trading activity by algorithmic and high-frequency trading programs;
- volatility in the stock prices of other companies in our industry or in the stock market generally; and
- other factors described in this "Risk Factors" section.

These and other external factors may cause the market price and demand for our common stock to fluctuate substantially, which may limit or prevent investors from readily selling their shares of common stock and may otherwise negatively affect the liquidity of our common stock. In addition, when the market price of a stock has been volatile, holders of that stock have instituted securities class action litigation against the company that issued the stock. If any of our stockholders brought a lawsuit against us, we could incur substantial costs defending the lawsuit. Such a lawsuit could also divert our management's time and attention.

If securities or industry analysts publish inaccurate or unfavorable research about our business, our stock price and trading volume could decline.

The trading market for our common stock depends in part on the research and reports that securities or industry analysts publish about us or our business. If one or more of the analysts who covers us downgrades our stock or publishes inaccurate or unfavorable research about our business, our stock price may decline. If one or more of these analysts ceases coverage of our company or fails to publish reports on us regularly, demand for our stock could decrease, which might cause our stock price and trading volume to decline.

In addition, as required by the revenue recognition standard, ASC 606, we disclose the aggregate unsatisfied amount of transaction price allocated to performance obligations as of the end of the reporting period. Market practices surrounding the calculation of this measure are still evolving. It is possible that analysts and investors could misinterpret our disclosure or that the terms of our research or license agreements or other circumstances could cause our methods for preparing this disclosure to differ significantly from others, which could lead to inaccurate or unfavorable forecasts by analysts and investors.

Regardless of accuracy, unfavorable interpretations of our financial information and other public disclosures could have a negative impact on our stock price. If our financial performance fails to meet analyst estimates, for any of the reasons discussed above or otherwise, or one or more of the analysts who cover us downgrade our common stock or change their opinion of our common stock, our stock price would likely decline.

If the ownership of our common stock continues to be highly concentrated, it may prevent you and other stockholders from influencing significant corporate decisions and may result in conflicts of interest that could cause our stock price to decline.

Our executive officers, directors and their affiliates beneficially own or control some of the outstanding shares of our common stock. Accordingly, these executive officers, directors and their affiliates, acting as a group, may have substantial influence over the outcome of corporate actions requiring stockholder approval, including the election of directors, any merger, consolidation or sale of all or substantially all our assets or any other significant corporate transactions. These stockholders may also delay or prevent a change of control of us, even if such a change of control would benefit our other stockholders. The significant concentration of stock ownership may adversely affect the trading price of our common stock due to investors' perception that conflicts of interest may exist or arise.

Volatility in the stock prices of other companies may contribute to volatility in our stock price.

The stock market in general, and the Nasdaq stock exchanges and the market for technology companies in particular, have experienced significant price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of those companies. Further, there has been particular volatility in the market prices of securities of early stage and clinical stage life sciences companies. These broad market and industry factors may seriously harm the market price of our common stock, regardless of our operating performance. In the past, following periods of volatility in the market price of a company's securities, securities class action litigation has often been instituted. A securities class action suit against us could result in substantial costs, potential liabilities and the diversion of management's attention and resources, and could harm our reputation and business.

Our common stock is not heavily traded and there may not be an active, liquid trading market for our common stock.

There is no guarantee that an active trading market for our common stock will be maintained on Nasdaq, or that the volume of trading will be sufficient to allow for timely trades. Investors may not be able to sell their shares quickly or at the latest market price if trading in our stock is not active or if trading volume is limited. In addition, if trading volume in our common stock is limited, trades of relatively small numbers of shares may have a disproportionate effect on the market price of our common stock.

Our stockholders will experience substantial additional dilution if outstanding equity awards are exercised or settled for common stock.

The exercise of stock options or settlement of equity awards for common stock would be substantially dilutive to the outstanding shares of common stock. Any dilution or potential dilution may cause our stockholders to sell their shares, which would contribute to a downward movement in the market price of our common stock.

Evolving regulation of corporate governance and public disclosure may result in additional expenses, use of resources and continuing uncertainty.

We regularly evaluate and monitor developments with respect to new and proposed laws, regulations and standards. For example, we spend significant financial and human resources to document and test the adequacy of our internal control over financial reporting to comply with the internal control requirements the Sarbanes-Oxley Act.

We intend to maintain high standards of corporate governance and public disclosure and to invest the resources necessary to comply with evolving laws, regulations and standards. This investment may result in increased general and administrative expenses and a diversion of management time and attention from revenue-generating activities to compliance activities.

Changing laws, regulations and standards relating to corporate governance and public disclosure create uncertainty for public companies. In many cases, changes lack specificity and compliance with these changes may evolve over time as new guidance is provided by regulatory and governing bodies. We cannot accurately predict or estimate the amount or timing of the additional effort or expense we may incur complying with changes in these laws, regulations and standards. Therefore, we can provide no assurance as to conclusions of management or by our independent registered public accounting firm with respect to the effectiveness of our internal control over financial reporting in the future. If our efforts to comply with new or changed laws, regulations and standards differ from the activities intended by regulatory or governing bodies, due to ambiguities related to practice or otherwise, regulatory authorities may initiate legal proceedings against us, which could be costly and time-consuming, and our reputation and business may be harmed.

We have never paid dividends on our capital stock, and we do not anticipate paying any cash dividends in the foreseeable future.

We have paid no cash dividends on any of our classes of capital stock to date and we currently intend to retain our future earnings, if any, to fund the development and growth of our businesses. In addition, the terms of existing or any future debts may preclude us from paying these dividends.

Conversion of our outstanding 2026 Notes may result in the dilution of existing stockholders, create downward pressure on the price of our common stock, and restrict our ability to take advantage of future opportunities.

The 2026 Notes may be converted into cash and shares of our common stock (subject to our right or obligation to pay cash in lieu of all or a portion of such shares). If shares of our common stock are issued to the holders of the 2026 Notes upon conversion, there will be dilution to our stockholders' equity and the market price of our shares may decrease due to the additional selling pressure in the market. Any downward pressure on the price of our common stock caused by the sale or potential sale of shares issuable upon conversion of the 2026 Notes could also encourage short sales by third parties, creating additional selling pressure on our stock. The existence of the 2026 Notes and the obligations that we incurred by issuing them may restrict our ability to take advantage of certain future opportunities, such as engaging in future debt or equity financing activities.

The accounting method for the 2026 Notes could adversely affect our reported financial condition and results.

The accounting method for reflecting the 2026 Notes on our balance sheet, accruing interest expense for the notes and reflecting the underlying shares of our common stock in our reported diluted earnings per share may adversely affect our reported earnings and financial condition.

Under applicable accounting principles, the initial liability carrying amount of the 2026 Notes will be the fair value of a similar debt instrument that does not have a conversion feature, valued using our cost of capital for straight, unconvertible debt. We currently reflect the difference between the net proceeds from the sale of the 2026 Notes and the initial carrying amount as a debt discount for accounting purposes, which is amortized into interest expense over the term of the 2026 Notes. As a result of this amortization, the interest expense recognized for the 2026 Notes for accounting purposes is greater than the cash interest payments we will pay on the 2026 Notes, which results in lower reported net income. The lower reported income resulting from this accounting treatment could depress the trading price of our common stock and the 2026 Notes.

In addition, under certain circumstances we may be eligible to use the treasury stock method to reflect the shares underlying the 2026 Notes in our diluted earnings per share. Under this method, if the conversion value of the 2026 Notes exceeds their principal amount for a reporting period, then we will calculate our diluted earnings per share assuming that all the 2026 Notes were converted and that we issued shares of our common stock to settle the excess. However, if reflecting the 2026 Notes in diluted earnings per share in this manner is anti-dilutive, or if the conversion value of the 2026 Notes does not exceed their principal amount for a reporting period, then the shares underlying the 2026 Notes will not be reflected in our diluted earnings per share. In addition, if accounting standards change in the future and we are not permitted to use the treasury stock method, then our diluted earnings per share may decline. For example, in July 2019, the Financial Accounting Standards Board published an exposure draft proposing to amend these accounting standards to eliminate the treasury stock method for convertible instruments and instead require application of the "if-converted" method. Under that method, if it is adopted, diluted earnings per share would generally be calculated assuming that all the 2026 Notes were converted solely into shares of common stock at the beginning of the reporting period, unless the result would be anti-dilutive. The application of the if-converted method may reduce our reported diluted earnings per share.

Furthermore, if any of the conditions to the convertibility of the notes is satisfied, then we may be required under applicable accounting standards to reclassify the liability carrying value of the 2026 Notes as a current, rather than a long-term, liability. This reclassification could be required even if no noteholders convert their 2026 Notes and could materially reduce our reported working capital.

The capped call transactions may affect the value of the 2026 Notes and our common stock.

In connection with the issuance of the 2026 Notes, we entered into certain capped call transactions (the "Capped Call Transactions") with the capped call counterparty. The Capped Call Transactions are generally expected to reduce the potential dilution as a result of conversion of the 2026 Notes and/or offset any cash payments we are required to make in excess of the principal amount of converted notes, as the case may be, with such reduction and/or offset subject to a cap.

In connection with establishing its initial hedge of the Capped Call Transactions, the capped call counterparty or its affiliates purchased shares of our common stock and/or entered into various derivative transactions with respect to our common stock. This activity could have increased (or reduced the size of any decrease in) the market price of our common stock or the 2026 Notes at that time.

In addition, the capped call counterparty or its affiliates may modify their hedge positions by entering into or unwinding various derivatives with respect to our common stock and/or purchasing or selling our common stock or other securities of ours in secondary market transactions (and are likely to do so on each exercise date of the Capped Call Transactions, which are expected to occur during the 60 trading day period beginning on the 61st scheduled trading day prior to the maturity date of the 2026 Notes, or following any

termination of any portion of the Capped Call Transaction in connection with any repurchase, redemption or early conversion of the 2026 Notes). This activity could also cause or avoid an increase or a decrease in the market price of our common stock or the 2026 Notes.

We are subject to counterparty risk with respect to the Capped Call Transactions.

The capped call counterparty to the agreement related to the Capped Call Transactions (the "Capped Call Agreements") is a financial institution, and we will be subject to the risk that the capped call counterparty may default or otherwise fail to perform, or may exercise certain rights to terminate, its obligations under the Capped Call Agreements. Our exposure to the credit risk of the capped call counterparty will not be secured by any collateral. If the capped call counterparty becomes subject to insolvency proceedings, we will become an unsecured creditor in those proceedings with a claim equal to our exposure at the time under such transaction. Our exposure will depend on many factors but, generally, our exposure will increase if the market price or the volatility of our common stock increases. In addition, upon a default or other failure to perform, or a termination of obligations, under the Capped Call Agreements by the capped call counterparty, we may suffer adverse tax consequences and more dilution than we currently anticipate with respect to our common stock. We can provide no assurances as to the financial stability or viability of the capped call counterparty.

A rating agency may not rate the notes or may assign a rating that is lower than expected.

We do not intend to seek to have the 2026 Notes rated by any rating agency. However, if one or more rating agencies rates the notes and assigns a rating that is lower than the rating that investors expect, or reduces their rating in the future, then the trading price of our common stock and the 2026 Notes could significantly decline.

In addition, market perceptions of our creditworthiness will directly affect the trading price of our common stock and the 2026 Notes. Accordingly, if a ratings agency rates any of our indebtedness in the future or downgrades or withdraws the rating, or puts us on credit watch, then the trading price of our common stock and the 2026 Notes will likely decline.

Provisions in our charter documents and under Delaware law could discourage a takeover that stockholders may consider favorable and may lead to entrenchment of management.

Our amended and restated certificate of incorporation and amended and restated bylaws contain provisions that may discourage, delay or prevent a merger, acquisition or other change in control of us that stockholders may consider favorable, including transactions in which you might otherwise receive a premium for your shares. These provisions also could limit the price that investors might be willing to pay in the future for shares of our common stock, thereby depressing the market price of our common stock. In addition, because our board of directors is responsible for appointing the members of our management team, these provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors. Among other things, these provisions:

- establish a classified board of directors with three-year staggered terms, which may delay the ability of stockholders to change the membership of a majority of our board of directors;
- eliminate cumulative voting in the election of directors, which limits the ability of minority stockholders to elect director candidates;
- establish the exclusive right of our board of directors to elect a director to fill a vacancy created by the expansion of the board of directors or the resignation, death or removal of a director, which prevents stockholders from being able to fill vacancies on our board of directors;
- prohibit removal of directors without cause;
- authorize our board of directors to issue preferred stock and to determine the price and other terms of those shares, including preferences and voting rights, without stockholder approval, which could be used to significantly dilute the ownership of a hostile acquirer;
- authorize our board of directors to alter our bylaws without obtaining stockholder approval;
- require the approval of at least two-thirds of the shares entitled to vote at an election of directors to adopt, amend or repeal our bylaws or repeal the provisions of our amended and restated certificate of incorporation regarding the election and removal of directors;
- prohibit stockholder action by written consent, which forces stockholder action to be taken at an annual or special meeting of our stockholders;

- require that a special meeting of stockholders be called only by the chairman of the board of directors, the chief executive officer, the president or the board of directors, which may delay the ability of our stockholders to force consideration of a proposal or to take action, including the removal of directors; and
- provide for advance notice procedures that stockholders must comply with in order to nominate candidates to our board of directors or to propose matters to be acted upon at a stockholders' meeting, which may discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer's own slate of directors or otherwise attempting to obtain control of us.

We are also subject to the anti-takeover provisions contained in Section 203 of the Delaware General Corporation Law. Under Section 203, a corporation may not, in general, engage in a business combination with any holder of 15% or more of its capital stock unless the holder has held the stock for three years or, among other exceptions, the board of directors has approved the transaction. These provisions could discourage potential acquisition proposals and could delay or prevent a change in control transaction. They could also have the effect of discouraging others from making tender offers for our common stock, including transactions that may be in your best interests. These provisions may also prevent changes in our management or limit the price that investors are willing to pay for our stock.

Claims for indemnification by our directors and officers may reduce our available funds to satisfy successful third-party claims against us and may reduce the amount of money available to us.

Our amended and restated certificate of incorporation and amended and restated bylaws provide that we will indemnify our directors and officers, in each case to the fullest extent permitted by Delaware law.

In addition, as permitted by Section 145 of the Delaware General Corporation Law, our amended and restated bylaws and our indemnification agreements that we have entered into with our directors and officers provide that:

- we will indemnify our directors and officers for serving us in those capacities or for serving other business enterprises at our request, to the fullest extent permitted by Delaware law. Delaware law provides that a corporation may indemnify such person if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the registrant and, with respect to any criminal proceeding, had no reasonable cause to believe such person's conduct was unlawful;
- we may, in our discretion, indemnify employees and agents in those circumstances where indemnification is permitted by applicable law;
- we are required to advance expenses, as incurred, to our directors and officers in connection with defending a proceeding, except that such directors or officers shall undertake to repay such advances if it is ultimately determined that such person is not entitled to indemnification;
- we will not be obligated pursuant to our amended and restated bylaws to indemnify a person with respect to proceedings initiated by that person against us or our other indemnitees, except with respect to proceedings authorized by our board of directors or brought to enforce a right to indemnification;
- the rights conferred in our amended and restated bylaws are not exclusive, and we are authorized to enter into indemnification agreements with our directors, officers, employees and agents and to obtain insurance to indemnify such persons; and
- we may not retroactively amend our amended and restated bylaw provisions to reduce our indemnification obligations to directors, officers, employees and agents.

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

None.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

ITEM 4. MINE SAFETY DISCLOSURES

None.

ITEM 5. OTHER INFORMATION

None.

ITEM 6.EXHIBITS

A list of exhibits filed with this Quarterly Report on Form 10-Q or incorporated herein by reference is found in the Index to Exhibits immediately following the signature page of this report and is incorporated into this Item 6 by reference.

Exhibit No.	Exhibits	Incorporated by Reference				Filed Herewith
		Form	File No.	Filing Date	Exh. No.	
3.1	Amended and Restated Certificate of Incorporation	S-3	333-174869	June 13, 2011	3.1	
3.2	Certificate of Amendment of Amended and Restated Certificate of Incorporation	8-K	000-50633	May 20, 2016	3.1	
3.3	Amended and Restated Bylaws	S-1	333-112261	January 27, 2004	3.2	
4.1	Specimen Common Stock Certificate	10-Q	000-50633	May 9, 2007	4.1	
10.1	Amended and Restated 2004 Equity Incentive Plan	S-8	333-238786	May 29, 2020	99.1	
10.2	Amended and Restated 2015 Employee Stock Purchase Plan	DEF14A	000-50633	March 26, 2020	Sch A	
*10.3	Fast Skeletal Regulatory Activator Agreement, dated April 23, 2020, by and between the Company and Astellas Pharma Inc.					X
*10.4	License and Collaboration Agreement for Other Skeletal Sarcomere Activators, dated April 23, 2020, by and between the Company and Astellas Pharma Inc.					X
31.1	Certification of Principal Executive Officer pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Securities Exchange Act, as amended					X
31.2	Certification of Principal Financial Officer pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Securities Exchange Act, as amended					X
31.3	Certification of Principal Accounting Officer pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Securities Exchange Act, as amended					X
32.1	Certifications of the Principal Executive Officer, Principal Financial Officer, and Principal Accounting Officer pursuant to 18 U.S.C 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (1)					X
101.INS	Inline XBRL Instance Document (the Instance Document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document)					X
101.SCH	Inline XBRL Taxonomy Extension Schema Document					X
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document					X
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document					X
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document					X
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document					X
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)					X

(1) This certification accompanies the Form 10-Q to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of the Registrant under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of the Form 10-Q), irrespective of any general incorporation language contained in such filing.

* Portions of the publicly filed document have been omitted pursuant to Item 601(b)(10)(iv) of Regulation S-K.

SIGNATURES

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

Dated: August 7, 2020

CYTOKINETICS, INCORPORATED
(Registrant)

/s/ Robert I. Blum
Robert I. Blum
President and Chief Executive Officer
(Principal Executive Officer)

/s/ Ching Jaw
Ching Jaw
Senior Vice President, Chief Financial Officer
(Principal Financial Officer)

/s/ Robert Wong
Robert Wong
Vice President, Chief Accounting Officer
(Principal Accounting Officer)

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

FAST SKELETAL REGULATORY ACTIVATOR AGREEMENT

This **Fast Skeletal Regulatory Activator Agreement** (this **"Agreement"**) is entered into on April 23, 2020 (the **"Effective Date"**) by and between **Cytokinetics, Inc.**, a corporation organized and existing under the laws of Delaware, having its principal place of business at 280 East Grand Avenue, South San Francisco, CA 94080, USA ("**Cytokinetics**"), and **Astellas Pharma Inc.**, a corporation organized and existing under the laws of Japan, having its registered office at 2-5-1, Nihonbashi-Honcho, Chuo-ku, Tokyo 103-8411, Japan ("**Astellas**"). Astellas and Cytokinetics are referred to in this Agreement individually as a "**Party**" and collectively as the "**Parties**."

Recitals

A. Cytokinetics is a biopharmaceutical company directed to the research and development of small molecule compounds that modulate muscle function, and owns certain patents and know-how relating to skeletal sarcomere activators;

B. Astellas is a pharmaceutical company working to create and develop novel therapies;

C. Cytokinetics and Astellas are parties to a License and Collaboration Agreement, dated June 21, 2013, amended and restated on December 22, 2014, and further amended, including on July 27, 2016, April 11, 2017, and December 21, 2017 (the "**Collaboration Agreement**"), pursuant to which they established a collaboration for the research, development and, if successful, commercialization of pharmaceutical products that contain certain fast skeletal regulatory activators (including the clinical development candidate known as *reldesemtiv* or CK-2127107, and the next generation development candidate known as CK-3762601) and certain other skeletal sarcomere activators. Under the Collaboration Agreement, Cytokinetics also granted Astellas an option to establish a collaboration for the development and, if successful, commercialization of pharmaceutical products that contain Cytokinetics' clinical development candidate *tirasemtiv*;

D. The Parties now wish to terminate the Collaboration Agreement with respect to all FSRAs (including *reldesemtiv* and CK-3762601) and FSRA Products and return the rights to such compounds and products to Cytokinetics, subject to Astellas' obligation to continue to share certain development costs, in exchange for the right to receive certain royalty payments from Cytokinetics, for *reldesemtiv* under this Agreement, all as set forth herein;

E. The Parties also wish to acknowledge that Astellas' option for *tirasemtiv* has expired and that Astellas has no future rights with respect to *tirasemtiv*; and

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

F. The Parties also wish to acknowledge that the Parties' collaboration and Astellas' rights under the Collaboration Agreement shall be limited to Other Skeletal Sarcomere Activators (as defined therein), and the Parties are in the process of negotiating an amendment of the Collaboration Agreement setting forth the terms and conditions with respect to such rights of Astellas.

NOW THEREFORE, in consideration of the foregoing premises and the mutual covenants contained herein, the receipt and sufficiency of which are hereby acknowledged, Cytokinetics and Astellas hereby agree as follows:

ARTICLE 1
DEFINITIONS

Unless the context otherwise requires, the terms in this Agreement with initial letters capitalized, shall have the meanings set forth below, or the meaning as designated in the indicated places throughout this Agreement.

1.1 "**Active Ingredient**" means the clinically active material(s) that provide pharmacological activity in a pharmaceutical product (excluding formulation components such as coatings, stabilizers, excipients or solvents, adjuvants or controlled release technologies).

1.2 "**Affiliate**" means, with respect to a Party, any Person that controls, is controlled by, or is under common control with that Party. For the purpose of this definition only, "**control**" (including, with correlative meaning, the terms "**controlled by**" and "**under the common control**") means the actual power, either directly or indirectly through one or more intermediaries, to direct or cause the direction of the management and policies of such Person, whether by the ownership of more than fifty percent (50%) of the voting stocking of such Person, by contract or otherwise.

1.3 "**ALS**" means amyotrophic lateral sclerosis.

1.4 "**API Inventory**" means the active pharmaceutical ingredients listed in **Exhibit H,** including specific batches of the active pharmaceutical ingredient for *Reldesemtiv* [*], which shall, for the avoidance of doubt, exclude the Clinical Materials.

1.5 "**Astellas FSRA Know-How**" means all Know-How that is (a) Controlled by Astellas or its Affiliates as of the Effective Date and (b) reasonably necessary or useful for the Development, Manufacture, Commercialization or Medical Affairs Activities of FSRAs or FSRA Products, provided, however, that Astellas FSRA Know-How specifically excludes Collaboration Know-How.

1.6 "**Astellas FSRA Patents**" means any Patent Right that is (a) Controlled by Astellas or its Affiliates as of the Effective Date, and (b) reasonably necessary or useful for the Development, Manufacture, Commercialization or Medical Affairs Activities of FSRAs or FSRA Products, provided, however, that Astellas FSRA Patents specifically exclude Collaboration Patents.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

1.7 "**Astellas FSRA Technology**" means the collective reference to Astellas FSRA Patents and Astellas FSRA Know-How.

1.8 "**Business Day**" means a day other than a Saturday, Sunday or a day that is a statutory holiday in Japan or a bank holiday in New York, USA.

1.9 "**CK-601**" means (a) the fast skeletal regulatory activator advanced to IND-enabling studies for development for licensed non-neuromuscular Indications under the Collaboration Agreement known as CK-3762601 and having the chemical name set forth in **Exhibit B**; and (b) any [*] in subclause (a) above.

1.10 "**CK-601 Product**" means any pharmaceutical product containing CK-601, alone or in combination with other Active Ingredients, in any formulation or dosage form and for any mode of administration.

1.11 "**Claims**" means all Third Party demands, claims, actions, proceedings and liability (whether criminal or civil, in contract, tort or otherwise) for losses, damages, reasonable legal costs and other reasonable expenses of any nature.

1.12 "**CMC Activities**" means the chemistry, manufacturing, control and other activities necessary or useful for generating the CMC Information required for Marketing Approval of any FSRA Product, including Manufacture of validation and/or clinical trial materials, which are necessary or useful to obtain Marketing Approval of any such FSRA Product.

1.13 "**CMC Information**" means information related to the chemistry, manufacturing and controls of a FSRA or a FSRA Product, as specified by FDA, EMA or other applicable Regulatory Authority.

1.14 "**Collaboration Intellectual Property**" means any information and materials, including discoveries, improvements, modifications, processes, methods, assay, designs, protocols, formulas, data, inventions, algorithms, forecasts, profiles, strategies, plans, results, coordinates for compound/apo protein structures, expression constructs, know-how and trade secrets, patentable or otherwise, that is discovered, generated, conceived and/or reduced to practice by or on behalf of either Party (including its Affiliates, employees, agents and contractors), whether solely or jointly, as a result of the performance of its activities under the Collaboration Agreement, in each case including all rights, title and interest in and to the intellectual property rights therein and thereto.

1.15 "**Collaboration Know-How**" means Know-How that is within the Collaboration Intellectual Property.

1.16 "**Collaboration Patents**" means Patent Rights that claim any Collaboration Intellectual Property.

1.17 "**Commercialize**" or "**Commercialization**" means all activities directed to marketing, promoting, advertising, exhibiting, distributing (including management of wholesalers), detailing or selling FSRA Products in the Field (including importing and exporting activities in connection therewith). For the avoidance of doubt, Commercialization does not include Medical Affairs Activities.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

1.18 "**Confidential Information**" of a Party means all Know-How, unpublished patent applications and other non-public information and data of a financial, commercial, business, operational or technical nature of such Party that is disclosed by or on behalf of such Party or any of its Affiliates or otherwise made available to the other Party or any of its Affiliates, in each case in connection with this Agreement, whether made available orally, visually, in writing or in electronic form. In addition and notwithstanding the foregoing, all Know-How, unpublished patent application and other non-public information and data that is related to FSRAs and FSRA Products (for clarity including all Collaboration Intellectual Property assigned to Cytokinetics under Section 2.2(a) and, to the extent pertaining to FSRA, Astellas FSRA Technology licensed to Cytokinetics under Section 2.2(b)) shall be deemed Confidential Information of Cytokinetics, regardless of which Party is the disclosing Party.

1.19 "**Control**" or "**Controlled**" means, with respect to any Know-How, Patent Rights or other intellectual property rights, that a Party has the legal authority or right (whether by ownership, license or otherwise) to grant a license, sublicense, access or right to use (as applicable) under such Know-How, Patent Rights, or other intellectual property rights to the other Party on the terms and conditions set forth herein, in each case without breaching the terms of any agreement with a Third Party.

1.20 "**Current Good Manufacturing Practice**" or "**cGMP**" shall mean any and all applicable current good manufacturing practices required by any and all governmental authorities having jurisdiction over an activity of a party or over product. Without limiting the foregoing, in the United States, this includes 21 CFR Parts 210 and 211, as amended; and in the European Union, this includes 003/94/EEC Directive (as supplemented by Volume 4 of EudraLex published by the European Commission) as amended, if and as implemented in the relevant constituent country.

1.21 "**CY 5031**" means the phase 3 clinical trial of the *Reldesemtiv* Product in ALS to be conducted by Cytokinetics pursuant to the plan and budget set forth in **Exhibit C** as such plan and budget may be updated or amended by Cytokinetics from time to time upon written notice to Astellas.

1.22 "**Develop**" or "**Development**" means all research and development activities for any FSRA or FSRA Product that are directed to, or useful for, obtaining Marketing Approval(s) of any FSRA Product, including: all non-clinical, preclinical and clinical activities, testing and studies of any such FSRA or FSRA Product (including IND-enabling studies and translational research); manufacturing development, process and formulation development; toxicology, pharmacokinetic, pharmacodynamic, drug-drug interaction, safety, tolerability and pharmacological studies; distribution of any such FSRA or FSRA Product for use in clinical trials (including placebos and comparators); statistical analyses; assay development; instrument design and development; protocol design and development; quality assurance and control; report writing; and the preparation, filing and prosecution of any MAA for all such FSRA Products; development activities directed to label expansion (including prescribing information) and/or obtaining Marketing Approval for one or more additional Indications or patient populations following initial Marketing Approval; development activities conducted after receipt of Marketing Approval which were a condition for the receipt of such Marketing Approval; and all regulatory activities related to any of the foregoing.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

1.23 "**Diligent Efforts**" means: where applied to carrying out specific tasks and obligations of a Party under this Agreement, expending [*] to accomplish such task or obligation as such Party would [*]. "Diligent Efforts" shall require that such Party (on its own and/or acting through any of its Affiliates, sublicensees or subcontractors), at a minimum: (i) promptly assign responsibility for such obligations to qualified personnel, set annual goals and objectives for carrying out such obligations, and monitor and hold personnel accountable for progress with respect to such goals and objectives; (ii) set and seek to achieve specific and meaningful objectives for carrying out such obligations, with timelines consistent with a comparable [*] program; and (iii) make and implement decisions and [*] designed to [*] with respect to such objectives. Notwithstanding the foregoing, in the context of [*], "Diligent Efforts" shall [*] in consideration for [*].

1.24 "**Dollar**" means U.S. dollar, and "$" shall be interpreted accordingly.

1.25 "**EMA**" means the European Medicines Agency or any successor entity thereto.

1.26 "**EU**" or the "**European Union**" means (a) the European Union and its member states as of the Effective Date, which are: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxemburg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, and Sweden, and (b) the United Kingdom, Norway, Iceland, Liechtenstein, Andorra, Monaco, San Marino and the Vatican, and each of their successors to the extent such successors occupy the same territory. For clarity, any of the named countries in subsection (a) shall remain part of the EU for the purpose of this Agreement regardless of whether they remain a member state of the EU.

1.27 "**FDA**" means the United States Food and Drug Administration or any successor entity thereto.

1.28 "**Field**" means the treatment, prevention and/or amelioration of any diseases and medical conditions in humans.

1.29 "**First Commercial Sale**" means, with respect to any FSRA Product in any particular country or jurisdiction, the first commercial sale of such FSRA Product to independent, unrelated persons in bona fide arm's length transactions for distribution, use or consumption in such country or jurisdiction after the Marketing Approvals have been obtained for such FSRA Product in such country or jurisdiction. For clarity, First Commercial Sale does not include any sale or transfer of any FSRA Product in early access or named patient programs.

1.30 "**FSRA**" or "**Fast Skeletal Regulatory Activator**" means, subject to the final sentence of this paragraph, (a) any small molecule compound that has a specified level of stimulatory activity against any [*], as set forth in the criteria in **Exhibit D**; and (b) any [*] in subclause (a) above. Fast Skeletal Regulatory Activators include *Reldesemtiv* and CK-601 but exclude [*].

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

1.31 "**FSRA Product**" means any pharmaceutical product containing a Fast Skeletal Regulatory Activator, alone or in combination with other Active Ingredients, in any formulation or dosage form and for any mode of administration. FSRA Products include the *Reldesemtiv* Product and CK-601 Product but exclude products containing [*].

1.32 "**GAAP**" means the U.S. generally accepted accounting principles.

1.33 "**Generic Product**" means, with respect to a *Reldesemtiv* Product in a particular country in the *Reldesemtiv* Royalty Territory, any pharmaceutical product that (a) contains the same Active Ingredients and formulation as such *Reldesemtiv* Product; (b) [*] in such country and [*] in such country; and (c) is sold in such country by a Third Party that is not an exclusive licensee or sublicensee of Cytokinetics or its Affiliates and did not purchase such product in a chain of distribution that included any of Cytokinetics, its Affiliates, licensees or sublicensees.

1.34 "**Governmental Authority**" means any federal, state, national, state, provincial or local government, or political subdivision thereof, or any multinational organization 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).

1.35 "**IND**" means any investigational new drug application, clinical trial application, clinical trial exemption or similar or equivalent application or submission for approval to conduct human clinical investigations filed with or submitted to a Regulatory Authority in conformance with the requirements of such Regulatory Authority.

1.36 "**Indication**" means any human diseases, syndromes and medical conditions that can be diagnosed, treated, prevented or ameliorated.

1.37 "**Know-How**" means any information and materials, including discoveries, improvements, modifications, processes, methods, assays, designs, protocols, formulas, data, inventions, algorithms, forecasts, profiles, strategies, plans, results, coordinates for compound/apo protein structures, expression constructs, know-how and trade secrets (in each case, patentable, copyrightable or otherwise), but excluding any Patent Rights.

1.38 "**Law**" means any federal, state, local, foreign or multinational law, statute, standard, ordinance, code, rule, regulation, resolution or promulgation, or any order by any Governmental Authority, or any license, franchise, permit or similar right granted under any of the foregoing, or any similar provision having the force or effect of law.

1.39 "**MAA**" or "**Marketing Authorization Application**" means an application to the appropriate Regulatory Authority for approval to commercially sell a FSRA Product (but excluding pricing approval) in the Field in a particular jurisdiction (including, without limitation, a New Drug Application in the U.S.) and all amendments and supplements thereto.

1.40 "**Major Market Country**" means any of the following: [*].

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

1.41 "**Manufacture**" and "**Manufacturing**" mean activities directed to manufacturing, processing, filling, finishing, packaging, labeling, quality control, quality assurance, testing and release, post-marketing validation testing, inventory control and management, storing and transporting FSRAs and/or FSRA Products.

1.42 "**Marketing Approval**" means all approvals necessary for the commercial sale of a FSRA Product in the Field in a given country or regulatory jurisdiction.

1.43 "**Medical Affairs Activities**" means activities, in compliance with all the applicable Law, designed to ensure or improve appropriate medical use of, conduct medical education regarding, or further research regarding, FSRAs and FSRA Products or to increase disease state awareness, including by way of example: (a) activities of medical scientific liaisons, which shall mean the following functions: (x) conduct of service based medical activities including providing input and assistance with consultancy meetings, recommending investigators for clinical trials and providing input in the design of such trials and other research related activities, and (y) delivery of non-promotional communications and conduct of non-promotional activities including presenting new clinical trial data and other scientific or disease state awareness information; (b) grants to support continuing medical education, symposia, or Third Party research related to FSRA Products; (c) development, publication and dissemination of publications relating to FSRAs and FSRA Products and relevant disease states; (d) medical information services provided in response to inquiries communicated via sales representatives or received by letter, phone call or email; (e) conducting advisory board meetings or other consultant programs; (f) support of investigator-initiated trials; (g) managing relationships with cooperative groups, physician/hospital networks and disease state or patient and caregiver advocacy groups; (h) establishing and implementing risk, evaluation and mitigation strategies; (i) voluntary phase 4 trials or post-approval patient registries; (j) health economic and outcomes research (HEOR) activities; (k) independent medical education activities; and (l) non-promotional exhibiting at medical and scientific fora. For the purposes of clarity, post-approval clinical studies within the approved Indications, which were a condition for the receipt of Marketing Approval, shall be included within Development and shall not be included within Medical Affairs Activities.

1.44 "**Net Sales**" means the gross amount billed or invoiced by or for the benefit of Cytokinetics, its Affiliates, licensees, and sublicensees to independent, unrelated persons in bona fide arm's length transactions with respect to a *Reldesemtiv* Product in the *Reldesemtiv* Royalty Territory, less the following deductions, as allocable to such *Reldesemtiv* Product (if not previously deducted from the amount invoiced):

(a) [*];

(b) [*];

(c) [*];

(d) [*]; and

(e) [*].

If a single item falls into more than one of the categories set forth in clauses (a)-(e) above, such item may not be deducted more than once.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

Sales among Cytokinetics, its Affiliates, licensees, and sublicensees shall be disregarded for purposes of calculating Net Sales except if such purchaser is a distributor, pharmacy or end user. Net Sales also exclude any sale or transfer of any FSRA Product in early access or named patient programs.

If a *Reldesemtiv* Product either (i) is sold in the form of a combination product containing both the applicable FSRA and one or more Active Ingredient(s) as separate molecular entity(ies) that are not such FSRA; or (ii) is sold in a form that contains (or is sold bundled with) a delivery device therefor (in either case ((i) or (ii)), a "**Combination *Reldesemtiv* Product**"), the Net Sales of such *Reldesemtiv* Product for the purpose of calculating royalties owed under this Agreement for sales of such *Reldesemtiv* Product, shall be determined as follows: first, the actual Net Sales of such Combination *Reldesemtiv* Product shall be determined by Cytokinetics using the above provisions, and then such amount shall be multiplied by the fraction A/(A+B), where A is the invoice price of the *Reldesemtiv* Product that contains only such FSRA, if sold separately, and B is the total invoice price of other Active Ingredient or delivery device in such Combination *Reldesemtiv* Product if sold separately. If any other Active Ingredient or delivery device in such Combination *Reldesemtiv* Product is not sold separately, Net Sales shall be calculated by multiplying actual Net Sales of such Combination *Reldesemtiv* Product by a fraction A/C where A is the invoice price of the *Reldesemtiv* Product that contains only such FSRA if sold separately, and C is the invoice price of such Combination *Reldesemtiv* Product. If neither such *Reldesemtiv* Product that contains only such FSRA nor any other Active Ingredient (or delivery device) in such Combination *Reldesemtiv* Product is sold separately, the adjustment to Net Sales shall be determined by the Parties in good faith to reasonably reflect the fair market value of the contribution of the applicable FSRA in such Combination *Reldesemtiv* Product to the total fair market value of such Combination *Reldesemtiv* Product.

With respect to any sale of any *Reldesemtiv* Product in a given country for any substantive consideration other than monetary consideration on arm's length terms (which has the effect of reducing the invoiced amount below what it would have been in the absence of such non-monetary consideration), for purposes of calculating the Net Sales, such *Reldesemtiv* Product shall be deemed to be sold exclusively for cash at the average Net Sales price charged to Third Parties for cash sales of such *Reldesemtiv* Product in such country during the applicable reporting period (or if there were only *de minimis* cash sales in such country, at the fair market value as determined in good faith based on pricing in comparable markets). Notwithstanding the foregoing, Net Sales shall not include amounts (whether actually existing or deemed to exist for purposes of calculation) for *Reldesemtiv* Product distributed for use in clinical trials.

Net Sales shall be calculated on an accrual basis, in a manner consistent with Cytokinetics' accounting policies for external reporting purposes, as consistently applied, in accordance with GAAP. To the extent any accrued amounts used in the calculation of Net Sales are estimates, such estimates shall be trued-up in accordance with Cytokinetics' accounting policies for external reporting purposes, as consistently applied, and Net Sales and related payments under this Agreement shall be reconciled as appropriate.

1.45 "**Patent Rights**" means all patents and patent applications (which shall be deemed to include certificates of invention and applications for certificates of invention), including all divisionals, continuations, substitutions, continuations-in-part, re-examinations, reissues,

additions, renewals, revalidations, extensions, registrations, pediatric exclusivity periods and supplemental protection certificates and the like of any such patents and patent applications, and any and all foreign equivalents of the foregoing.

1.46 "**Person**" means any individual, partnership, limited liability company, firm, corporation, association, trust, unincorporated organization or other entity.

1.47 "***Reldesemtiv***" means (a) Cytokinetics' proprietary compound known as *reldesemtiv* (also known as CK-2127107), which is the subject of U.S. IND No. [*], and (b) any [*] in subclause (a) above. For clarity, *Reldesemtiv* is the Lead Compound under the Collaboration Agreement.

1.48 "***Reldesemtiv* Product**" means any pharmaceutical product containing *Reldesemtiv*, alone or in combination with other Active Ingredients, in any formulation or dosage form and for any mode of administration.

1.49 "***Reldesemtiv* Royalty Territory**" means U.S., Canada and the countries in the EU.

1.50 "**Regulatory Authority**" means any applicable Governmental Authority responsible for granting Marketing Approvals or pricing approvals for any FSRA Product, including the FDA, the EMA and any corresponding national or regional regulatory authorities.

1.51 "**Regulatory Materials**" means any regulatory application, submission, notification, communication, correspondence, registration and other filings made to, received from or otherwise conducted with a Regulatory Authority in order to Develop, Manufacture, or Commercialize any FSRA or FSRA Product in the Field in a particular country or jurisdiction. "Regulatory Materials" includes any IND, MAA and Marketing Approval.

1.52 "[*] **Compounds**" means (a) *Tirasemtiv*, (b) any compositions of matter (i) falling within the scope of any of the generic formulas disclosed in the Patent Rights listed in **Exhibit E** (the "[*] **Patent Rights**") and/or (ii) specifically disclosed in the [*] Patent Rights; and (c) any [*] in subclause (a) or (b) above.

1.53 "**Third Party**" means any Person other than a Party or an Affiliate of a Party.

1.54 "***Tirasemtiv***" means Cytokinetics' proprietary compound formerly known as CK-2017357.

1.55 "***Tirasemtiv* Product**" means any pharmaceutical product containing *Tirasemtiv* (including any [*] thereof).

1.56 "**United States**" or "**U.S.**" means the United States of America, including its fifty (50) states and the District of Columbia.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

1.57 Additional Definitions. The following table identifies the location of definitions set forth in various Sections of the Agreement:

Defined Terms	Section
2019 Letter	4.2(b)
Acceptance Date	4.2(b)
Acquisition	2.1(b)
Astellas Indemnitees	10.1
Clinical Materials	4.2(b)
CMC Assistance	2.6(b)
Combination *Reldesemtiv* Product	1.44(e)
Competing Program	2.1(b)
Cytokinetics Indemnitees	10.2
Disclosing Party	7.1(a)
FSRA Collaboration IP	2.2(a)
FSRA Collaboration Patents	2.2(a)
FSRA Invention	6.1
Indemnified Party	10.3
Indemnifying Party	10.3
Inventory	9.2(e)
[*] Rules	11.6
Receiving Party	7.1(a)
Regulatory Assistance	2.4(b)
Reldesemtiv Royalty Term	5.2(b)
SEC	7.4(b)
[*] Patent Rights	1.52
Shared Development Advance Invoice	5.1(b)(i)
Shared Development Cost	5.1(a)
Shared Development True Up Report	5.1(b)(ii)
[*]	[*]
Tirasemtiv IP	3.2

1.58 Interpretation. In this Agreement, unless otherwise specified:

(a) The words “include”, “includes” and “including” shall be deemed to be followed by the phrase “without limitation;”

(b) words denoting the singular shall include the plural and vice versa and words denoting any gender shall include all genders;

(c) the word “or” is used in the inclusive sense typically associated with the phrase “and/or;”

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

(d) 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;

(e) “days” means calendar days; and

(f) the Exhibits and other attachments form part of the operative provision of this Agreement and references to this Agreement shall include references to the Exhibits and attachments.

ARTICLE 2
Termination and Reversion of FSRA Products

2.1 Termination.

(a) The Parties hereby terminate the Collaboration Agreement, and all rights and obligations of the Parties thereunder, with respect to any and all FSRAs and FSRA Products, including *Reldesemtiv* and *Reldesemtiv* Products. After the Effective Date of this Agreement, the license and other rights granted by Cytokinetics to Astellas under the Collaboration Agreement shall terminate with respect to any and all FSRAs and FSRA Products.

(b) Other than in connection with activities conducted for Cytokinetics under this Agreement, for a period of four (4) years after the Effective Date, Astellas hereby agrees not to, directly or indirectly, by itself or through any of its Affiliates or collaborators, research, develop, manufacture and/or commercialize any (i) FSRA or FSRA Product, or (ii) [*] Compound or any product containing a [*] Compound. Notwithstanding the foregoing, if, during such four (4) year period, (i) Astellas or any of its Affiliates acquires, is acquired, merges or consolidates with any Third Party (an "**Acquisition**"), and if such Third Party, as of the effective date of such Acquisition, is engaged directly or indirectly, in any activities that, if carried out by Astellas or its Affiliates, would cause Astellas to breach its exclusivity obligations under this Section 2.1(b) (such activities, a "**Competing Program**") then such Acquisition [*], shall not constitute a breach of the exclusivity obligations of Astellas under Section 2.1(b); provided that [*] such Acquisition, such Competing Program is not [*] such Third Party. For purposes hereof, [*] shall mean that the Competing Program [*] of the [*] of the Third Party, or otherwise [*] of the Third Party, in each case [*] completion of the Acquisition.

(c) Notwithstanding the foregoing, in the event Astellas determines that it wishes to pursue any [*], upon the request from Astellas in writing, the Parties agree to discuss in good faith the possibility to collaborate on such pursuit, provided that: (i) Cytokinetics is not at the time of such notice [*], and (ii) the Parties first enter into a customary confidentiality and non-use agreement substantially on the same terms as those set forth in Article 7 below.

2.2 IP Assignment and License.

(a) Astellas hereby assigns to Cytokinetics all of Astellas’ right, title and interests in and to all Collaboration Intellectual Property, if any, that solely relates to FSRAs and FSRA Products worldwide (“**FSRA Collaboration IP**”, and the Patent Rights included therein, the “**FSRA Collaboration Patents**”). The FSRA Collaboration Patents that are filed as of the

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Effective Date are set forth on **Exhibit F**. Cytokinetics shall be responsible at its sole cost for preparing any assignments or any other procedures necessary to effectuate such assignment (e.g., an interaction with patent offices and its related cost), and upon Cytokinetics' request, Astellas shall provide reasonable support for such Cytokinetics' actions reasonably necessary to effectuate such assignment at no additional cost to Cytokinetics.

(b) In addition, Astellas hereby grants Cytokinetics an exclusive, worldwide, irrevocable, and perpetual license, with the right to grant sublicense through multiple tiers, under Astellas FSRA Technology and its interest in all Collaboration Intellectual Property, if any (other than FSRA Collaboration IP assigned to Cytokinetics under Section 2.2(a) above, if any) to research, develop, import, use, make, have made, offer for sale and sell FSRAs and FSRA Products in the Field.

2.3 Patent Prosecution and Enforcement. After the Effective Date, Astellas shall promptly transfer to Cytokinetics, and, as between the Parties, Cytokinetics shall thereafter have the sole and exclusive right to, at its discretion and expense, prosecute and maintain the FSRA Collaboration Patents, and the sole and exclusive right to enforce, at its discretion and expense, the FSRA Collaboration Patents and the Astellas FSRA Patents against any infringement that materially and adversely affects or is expected to have a material adverse effect on any FSRA Product.

2.4 Regulatory Materials and Regulatory Assistance.

(a) Within [*] days of the Effective Date, Astellas shall transfer, assign and deliver to Cytokinetics, at no cost to Cytokinetics, all Regulatory Materials relating to any FSRA Product and data from preclinical, non-clinical and clinical studies conducted by or on behalf of Astellas, its Affiliates or sublicensees relating to any FSRA or FSRA Product, in each case all as set forth on **Exhibit G**. Such transfer shall be effectuated through the delivery of documents to a data room or other means to be agreed between the Parties. If at any time prior to the earlier of (i) such date falling [*] months from the Effective Date and (ii) the date of [*], either Party discovers, after such transfer, that Astellas is still in possession of any other Regulatory Materials relating to any FSRA Product or data from preclinical, non-clinical and clinical studies conducted by or on behalf of Astellas, its Affiliates or sublicensees relating to any FSRA or FSRA Product, then such Party shall promptly notify the other Party in writing and Astellas shall promptly transfer and deliver such other Regulatory Materials and/or data to Cytokinetics to the extent within the possession or Control of Astellas or its Affiliates through a data room or other means to be agreed between the Parties, at no cost to Cytokinetics. The ownership of Regulatory Materials and/or data set forth on **Exhibit G** shall be deemed to be assigned to Cytokinetics as of the Effective Date, and the ownership of such other Regulatory Materials and/or data not set forth on **Exhibit G** but to be transferred and delivered under this Section 2.4(a) shall be deemed to be assigned to Cytokinetics as of the date when they are transferred to Cytokinetics. The ownership of all pharmacovigilance data (including all adverse event databases) solely relating to any FSRA or FSRA Product shall be deemed assigned to Cytokinetics as of the Effective Date.

(b) At Cytokinetics' reasonable request, Astellas shall provide Cytokinetics with assistance with responding to any inquiries from Regulatory Authorities relating to any clinical trials (CL-3001 and CL-3002) or Astellas' interactions with Regulatory Authorities

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previously conducted by Astellas under the Collaboration Agreement for FSRA or FSRA Product during a period of [*] months after the Effective Date through [*], or any successor of him appointed by Astellas at Astellas' sole discretion who has sufficient knowledge to provide such assistance, subject to Section 2.6(e) (the "**Regulatory Assistance**").

(c) All such Regulatory Materials and data, set forth on **Exhibit G**, shall be deemed as Confidential Information of Cytokinetics as of the Effective Date and all other Regulatory Materials and data provided by Astellas to Cytokinetics under Section 2.4(a) shall be deemed Confidential Information of Cytokinetics at the date of transfer. All such Regulatory Materials and data shall be retained by Astellas solely for the purpose of (i) providing the assistance to Cytokinetics as described herein or (ii) responding to Regulatory Authority's request during the inspections to Astellas. On the [*] anniversary of the date when they are transferred to Cytokinetics or sooner if requested by Cytokinetics in writing, Astellas shall delete any electronic copies and destroy any tangible copies of such Regulatory Materials and data, provided that (i) Astellas shall be permitted to retain copies of pharmacovigilance data (including any adverse events reports); and (ii) Astellas shall not be required to delete any electronic copy on its archival server as a result of its routine archival practice or as otherwise required by Law, provided that all such copies shall remain subject to the confidentiality and non-use obligation of Astellas under this Agreement.

2.5 Trademarks. Astellas represents and warrants that, as of the Effective Date, neither it nor its Affiliates own or otherwise Control any trademarks or trade names used, or contemplated for use on any FSRA Product and any applications therefor. Cytokinetics and its Affiliates and licensees shall have the right to refer to any FSRA or FSRA Product by Astellas compound identifier solely for internal tracking purposes. Astellas represents and warrants that, as of the Effective Date, neither it nor any of its Affiliates has filed any trademark applications for generic or brand names for any FSRA, including *Reldesemtiv*, or FSRA Product, including any *Reldesemtiv* Product.

2.6 Transition Assistance. Astellas shall provide the following transitional assistance, at its own cost.

(a) During the period of [*] days after the Effective Date, Cytokinetics may request Astellas to assign the rights and have Cytokinetics assume the obligations under any agreement(s) listed in **Exhibit I**. Upon such request from Cytokinetics, Astellas shall (i) subject to [*] assign, and to ensure that its Affiliates assign all of its rights under such agreement(s), in whole or in part to Cytokinetics, subject to Cytokinetics assuming the then remaining unaccrued obligations under such agreement(s), and (iii) subject to [*], permit Cytokinetics access to any communication portal (if any) so established with such counterparty of such agreement. In any case, Astellas shall [*] of such agreement before assignment to Cytokinetics. For clarity, Astellas [*]of any such agreement [*] to assign such agreement to Cytokinetics. For any agreement(s) listed in **Exhibit I** that is not assigned by Astellas to Cytokinetics, at Cytokinetics' request and expense (other than expenses and costs specified to be borne by Astellas under this Agreement), Astellas shall complete any ongoing projects and obtain any deliverables for the sole benefit of Cytokinetics. Subject to [*], Astellas shall provide Cytokinetics with the right and access to the work product generated thereunder. In addition, Astellas shall (i) continue to monitor, and at Cytokinetics' request and at Cytokinetics' sole cost and expense, use Diligent Efforts to enforce

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any confidentiality, non-use, exclusivity, covenant and indemnification provisions thereunder for the sole benefit of Cytokinetics (provided that Astellas shall not [*] without Cytokinetics' request and agreement [*]), and (ii) in the event any intellectual property is generated under any such agreement that would otherwise be owned by, or licensed or assigned to Astellas under the terms of such agreement, subject to [*], notify Cytokinetics and, promptly assign or sublicense, as applicable, to Cytokinetics all of its rights, title and interest in such intellectual property to Cytokinetics. If at any time prior to the earlier of (i) such date falling [*] months from the Effective Date and (ii) the date of [*], either Party discovers that there was any Third Party agreement that Astellas entered into in connection with the exploitation of any FSRA Product under the Collaboration Agreement that was omitted in **Exhibit I**, then such Party shall promptly notify the other Party in writing and such agreement shall be subject to this Section 2.6(a).

(b) Within [*] days after the Effective Date, Astellas shall transfer and deliver (including when available, in electronic format), at no cost to Cytokinetics, the Astellas FSRA Know-How and Collaboration Know-How assigned to Cytokinetics under Section 2.2(a) or licensed under Section 2.2(b) that are in Astellas' possession as of the Effective Date, all as set forth on **Exhibit G** to Cytokinetics or its designee, through the delivery of documents to a data room or other means to be agreed between the Parties. If at any time prior to the earlier of (i) such date falling [*] months from the Effective Date and (ii) the date of [*], either Party discovers, after such transfer, that Astellas is still in possession of any other Astellas FSRA Know-How or Collaboration Know-How, including without limitation: study protocols, study results, analytical methodologies, statistical analysis plans, CMC Information (including bulk and final product manufacturing processes, batch records, vendor information and validation documentation, and any other Know-How and materials required for Cytokinetics or its designee to assume the manufacture of FSRAs and/or FSRA Products), expert opinions, and analyses, in each case to the extent such materials pertain to FSRAs and FSRA Products, then such Party shall promptly notify the other Party in writing and Astellas shall to the extent within the possession or Control of Astellas or its Affiliates promptly transfer and deliver such other Astellas FSRA Know-How or Collaboration Know-How to Cytokinetics through a data room or other means to be agreed between the Parties at no cost to Cytokinetics. The ownership of such Astellas FSRA Know-How and Collaboration Know-How shall be deemed to be assigned to Cytokinetics as of the Effective Date. In addition, at Cytokinetics' reasonable request, and subject to Astellas' consent to provide such assistance which consent shall not be unreasonably withheld, Astellas shall provide Cytokinetics reasonable technical assistance in connection with such Astellas FSRA Know-How and Collaboration Know-How related to Manufacturing the FSRAs and/or FSRA Products through [*], or any successor of them appointed by Astellas at Astellas' sole discretion who has sufficient knowledge to provide such assistance, subject to Section 2.6(e) (the "**CMC Assistance**"). From and after the Effective Date, all such Astellas FSRA Know-How or Collaboration Know-How transferred and delivered to Cytokinetics under this Section 2.6(b) shall be deemed as Confidential Information of Cytokinetics and shall be retained by Astellas solely for the purpose of providing the assistance to Cytokinetics as described herein. On the [*] anniversary of the date when they are transferred to Cytokinetics or sooner if requested by Cytokinetics in writing, Astellas shall delete any electronic copies and destroy any tangible copies of such Know-How, provided that Astellas shall not be required to delete any electronic copy on its archival server as a result of its routine archival practice or as otherwise required by Law, provided that all such copies shall remain subject to the confidentiality and non-use obligation of Astellas under this Agreement.

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(c) Astellas shall transfer to Cytokinetics all rights to publications relating to FSRAs and FSRA Products (including data to be published, manuscript in preparation and pending publications as set forth on **Exhibit J**).

(d) In addition to the foregoing, Astellas shall use its Diligent Efforts to conduct those activities for which it was responsible for under the Collaboration Agreement to ensure orderly transition and uninterrupted Development, Manufacturing, Commercialization and Medical Affairs Activities of FSRAs and FSRA Products by Cytokinetics, subject to Section 2.6(e).

(e) In respect of this Section 2.6, Astellas shall provide (i) up to [*] hours per month for CMC Assistance for a period of [*] months after Cytokinetics receives all the materials and information set forth on **Exhibit G** (provided that such materials and information are all provided within [*] days of the Effective Date, otherwise the period will be extended by the period of delay), and (ii) up to [*] hours per month for Regulatory Assistance for a period of [*] months after Cytokinetics receives all the materials and information set forth on **Exhibit G** (provided that such materials and information are all provided within [*] days of the Effective Date, otherwise the period will be extended by the period of delay). Any CMC Assistance or Regulatory Assistance in excess of the foregoing hourly amounts shall be subject to reimbursement by Cytokinetics at the rate of [*] Japanese Yen pro-rated per person per day, payable in Dollars. All transitional services shall be conducted on site at Astellas or by teleconference, unless the Parties otherwise agree. Astellas shall not be required to [*]. Astellas shall reimburse Cytokinetics for any costs incurred in translating (as certified translations) from Japanese into English those documents [*]. For the avoidance of doubt, any transfer or delivery of Astellas FSRA Know-How, Collaboration Know-How, Regulatory Materials, data or other materials pursuant to Sections 2.4 or 2.6 shall be at no cost to Cytokinetics.

2.7 Relationship to Collaboration Agreement. Notwithstanding anything to the contrary in the Collaboration Agreement (including the survival provisions therein), after the Effective Date, the rights and obligations of the Parties with respect to FSRAs and FSRA Products shall be subject exclusively and solely pursuant to the terms and conditions of this Agreement, and the terms and conditions of 2019 Letter relating to the supply of clinical materials. The terms of any other agreement (e.g., the *Reldesemtiv* pharmacovigilance agreement dated January 25, 2016, including any amendments thereto) or document including the Collaboration Agreement shall have no further effect. Specifically and without limiting the foregoing, neither Party shall have any payment obligation to the other Party in connection with any FSRA or FSRA Product (in the form of payment, offset, credit or otherwise), other than specifically set forth in this Agreement.

ARTICLE 3
Expiration of *Tirasemtiv* Option

3.1 Option Expiration. The Parties hereby acknowledge and agree that, as of the Effective Date, the option granted by Cytokinetics to Astellas for *Tirasemtiv* Product under the Amendment to the Amended and Restated License and Collaboration Agreement, dated July 27, 2016, has expired without exercise by Astellas. After the Effective Date, Astellas shall not have any right, and Cytokinetics shall not have any obligation, with respect to *Tirasemtiv* Product.

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3.2 IP Assignment. Astellas hereby represents and warrants that, as of the Effective Date neither it nor its Affiliates own or otherwise Control any data, results, material, information and Know-How generated under the Collaboration Agreement that pertain to the composition or formulation of, or the method of making or using, *Tirasemtiv or Tirasemtiv* Product, or any Patent Rights or Option IP claiming any of the foregoing throughout the world (collectively, the "***Tirasemtiv* IP**"). In the event the above representation and warranty is inaccurate, Astellas hereby assigns to Cytokinetics all of Astellas' right, title and interest in and to all *Tirasemtiv* IP owned or otherwise Controlled by Astellas or any of its Affiliates as of the Effective Date. Upon Cytokinetics' request, Astellas shall execute and take such further actions reasonably necessary to effectuate such assignment, at Cytokinetics' sole cost and expense [*] set forth in this Section 3.2 shall be to assign to Cytokinetics all of Astellas' right, title and interest in and to all *Tirasemtiv* IP owned or otherwise Controlled by Astellas or any of its Affiliates as of the Effective Date.

ARTICLE 4
Further Exploitation of FSRA Products

4.1 General. Between the Parties, Cytokinetics shall have the sole right to make decisions regarding the further Development, Manufacture and Commercialization and Medical Affairs Activities of the FSRA Products in the Field, including Development, regulatory, CMC Activities, Manufacture, Medical Affairs Activities, promotion, pricing, reimbursement and other Commercialization activities, and such decisions shall not be subject to the oversight or decision making of any joint committee under the Collaboration Agreement.

4.2 Manufacture and Supply.

(a) Promptly after the Effective Date for the inventories indicated as "Priority" on **Exhibit H** and during the period of [*] days after the Effective Date for other inventories on **Exhibit H**, Astellas shall deliver to Cytokinetics or its designee on [*] basis at Astellas' site in Japan inventories of all FSRAs and FSRA Products (including *Reldesemtiv*, *Reldesemtiv* Product, CK-601 and CK-601 Product, and including the API Inventory, CMC materials and all research materials, final product, bulk drug substance, intermediates, starting/raw materials, work-in-process, formulation materials, reference standards, packaged retention samples, and the like) as set forth in **Exhibit H**. If at any time prior to the earlier of (i) such date falling [*] months from the Effective Date and (ii) the date of [*], either Party becomes aware that any materials meeting the description in the first sentence of this Section 4.2(a) are still in Astellas' possession, such Party shall notify the other Party in writing immediately and, upon Cytokinetics' request, Astellas shall promptly deliver such materials to Cytokinetics on [*] basis at Astellas' site in Japan, and Astellas shall not have the right to use or transfer such materials for any other purpose. Notwithstanding anything to the contrary in this Agreement, the title of (i) such materials set forth in **Exhibit H** shall be transferred from Astellas to Cytokinetics as of the date when they are delivered to Cytokinetics or its designee in accordance with this Section 4.2(a), and (ii) any materials not set forth in **Exhibit H** but delivered in accordance with this Section 4.2 upon the request of Cytokinetics shall be transferred from Astellas to Cytokinetics as of the date when they are delivered to Cytokinetics or its designee in accordance with this Section 4.2(a). For clarity, the cost and expense incurred by Astellas to Manufacture (or have Manufactured) and transfer such inventory shall not be included in Shared Development Cost under Section 5.1 or subject to reimbursement by Cytokinetics.

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(b) Under that certain letter agreement between Cytokinetics and Astellas, dated March 28, 2019 (the "**2019 Letter**"), Astellas has Manufactured [*] product (collectively, the "**Clinical Materials**") on behalf of Cytokinetics for clinical Development use, which is being stored by Astellas and is the subject of an ongoing stability study being conducted by Astellas on behalf of Cytokinetics. In accordance with the 2019 Letter, Astellas shall supply the Clinical Materials to Cytokinetics or any Third Party designated by Cytokinetics. Cytokinetics shall pay to Astellas by wire transfer of immediately available funds to an account designated by Astellas in writing the sum of [*] as the consideration of the Clinical Materials. Such amount shall be payable no later than [*] the date when the Clinical Materials are delivered to Cytokinetics and accepted by Cytokinetics in accordance with the quality agreement to be agreed between the Parties (the "**Acceptance Date**"). To the extent such amount is not paid by [*] the Acceptance Date, then such amounts shall accrue interest in accordance with Section 5.5.

(c) Unless Cytokinetics notifies Astellas otherwise, on behalf of Cytokinetics, Astellas shall continue (or have continued) any ongoing stability studies pertaining to any materials transferred or supplied to Cytokinetics under this Section 4.2 and provide Cytokinetics with the results of such stability studies, all at Astellas' own cost and expense (which shall not be included in the Shared Development Cost under Section 5.1 or subject to reimbursement by Cytokinetics).

(d) After the completion of the Manufacture technology transfer set forth in Section 2.6, Cytokinetics shall retain all rights under the Collaboration Intellectual Property for the Manufacture and supply of FSRAs and FSRA Products for any purpose including Development and Commercialization use.

ARTICLE 5
Development Cost Sharing and Recoupment

5.1 Development Cost Sharing.

(a) **General**. Subject to the remainder of this Section 5.1 (including the cap set forth in Section 5.1(c) below), Cytokinetics and Astellas shall share the out-of-pocket clinical cost incurred by or on account of Cytokinetics in CY 5031 (the "**Shared Development Cost**") at the ratio of Cytokinetics sixty-seven percent (67%) and Astellas thirty-three percent (33%). For clarity, as between the Parties, Cytokinetics shall be solely responsible for the cost of any Development work for the *Reldesemtiv* Product other than the out-of-pocket clinical cost incurred by or on account of Cytokinetics in CY 5031.

(b) **Reimbursement.** Subject to the cap set forth in Section 5.1(c) below, Astellas shall reimburse Cytokinetics thirty-three percent (33%) of the Shared Development Cost as follows:

(i) **Advance Payment.** For each calendar quarter in which Cytokinetics is anticipated to incur any Shared Development Cost for CY 5031, Cytokinetics shall submit to Astellas an invoice setting forth thirty-three percent (33%) of Cytokinetics' estimated Shared Development Cost for CY 5031 for such calendar quarter, no later than [*] Business Days following the first day of such calendar quarter (the "**Shared Development Advance Invoice**").

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

(ii) **True Up**. Within [*] days after the end of each calendar quarter in which Cytokinetics has incurred any Shared Development Cost for CY 5031, Cytokinetics shall submit to Astellas a reasonably detailed reconciliation report setting forth the accounting for, and an invoice for thirty-three percent (33%) of, the actual Shared Development Cost for CY 5031incurred by or on account of Cytokinetics in such calendar quarter and any credits or deficits from the corresponding Shared Development Advance Invoice previously provided for such quarter (the "**Shared Development True Up Report**"). If the estimated Shared Development Cost paid by Astellas pursuant to Section 5.1(b)(i) above for such calendar quarter is less than thirty-three percent (33%) of Cytokinetics' actual Shared Development Cost for such quarter, then Astellas shall pay the deficit to Cytokinetics as described in this Section 5.1(b)(ii). If the estimated Shared Development Cost paid by Astellas pursuant to Section 5.1(b)(i) above for such prior calendar quarter is more than thirty-three percent (33%) of Cytokinetics' actual Shared Development Cost for such calendar quarter, the excess shall be credited toward the Shared Development Advance Invoice for the next calendar quarter (except where such invoice is the final such invoice to be provided by Cytokinetics, in which case the excess shall be refunded by Cytokinetics to Astellas within [*] days after the delivery of such invoice).

(iii) **Timing of Payment.** For ease of administration, Astellas shall pay Cytokinetics a single payment reflecting the amount due under the Shared Development Advance Invoice for the current calendar quarter plus any deficits (or less any credits) reflected in the Shared Development True Up Report for the prior calendar quarter within the later of (i) [*] days of Astellas' receipt of such Shared Development Advance Invoice, or (ii) [*] days of Astellas' receipt of such Shared Development True Up Report.

(c) **Cap on Astellas' Obligation.** Astellas' obligation to share the Shared Development Cost shall cease once the total amount paid by Astellas under this Section 5.1 reaches twelve million Dollars ($12,000,000). Cytokinetics shall be solely responsible for the cost of CY 5031 after such cap has been reached (if any).

5.2 **Royalty Payment from Cytokinetics to Astellas.**

(a) **Royalty Rate**. In consideration of Astellas' contribution to the Shared Development Cost and subject to the remainder of this Section 5.2, but if and only if Astellas fulfills all of its funding obligations under Section 5.1, during the *Reldesemtiv* Royalty Term, Cytokinetics shall make quarterly royalty payments to Astellas equal to [*] percent ([*]%) of the Net Sales of the *Reldesemtiv* Product sold in the *Reldesemtiv* Royalty Territory during the applicable *Reldesemtiv* Royalty Term. For clarity, no royalty payment shall be due on the Net Sales of the *Reldesemtiv* Product sold outside the *Reldesemtiv* Royalty Territory.

(b) ***Reldesemtiv* Royalty Term**. Cytokinetics' royalty payment obligations under this Section 5.2 with respect to a *Reldesemtiv* Product shall commence upon the First Commercial Sale of the *Reldesemtiv* Product after the Marketing Approval thereof for the ALS indication anywhere in the *Reldesemtiv* Royalty Territory by Cytokinetics, its Affiliates, licensees or sublicensees, and shall continue, on a product-by-product basis in the *Reldesemtiv* Royalty Territory, until the later of (A) December 31, 2034; and (B) ten (10) years after the First Commercial Sale of such *Reldesemtiv* Product in the first Major Market Country (the "***Reldesemtiv* Royalty Term**").

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

(c) Royalty Reduction.

(i) On a product-by-product and country-by-country basis, the royalty rate set forth in Section 5.2(a) for a *Reldesemtiv* Product in a country in the *Reldesemtiv* Royalty Territory shall be reduced to [*] percent ([*]%) for all *Reldesemtiv* Products after the first Market Approval of such *Reldesemtiv* Product in such country for any Indication other than ALS.

(ii) If a *Reldesemtiv* Product is [*] in a country during the *Reldesemtiv* Royalty Term at a time when [*] with respect to such *Reldesemtiv* Product [*] in such country, and (i) such [*] or (ii) such [*] for such *Reldesemtiv* Product in such country [*] in such country, then the [*] of such *Reldesemtiv* Product in such country [*] so long as the [*] with respect to such *Reldesemtiv* Product [*] in such country [*].

(d) Royalty Reports and Payment. Within [*] days after each calendar quarter, commencing with the calendar quarter during which the First Commercial Sale of the first *Reldesemtiv* Product is made anywhere in the *Reldesemtiv* Royalty Territory and through the *Reldesemtiv* Royalty Term, Cytokinetics shall provide Astellas with a report that contains the following information for the applicable calendar quarter, on a product-by-product and country-by-country basis: (1) the amount of gross sales of each *Reldesemtiv* Product in the *Reldesemtiv* Royalty Territory, (2) an itemized calculation of Net Sales showing deductions provided for in the definition of "Net Sales", (3) a calculation of the royalty payment due on such sales, including [*] in accordance with Section [*], and (4) the exchange rate for such country. Within [*] days after each calendar quarter, Cytokinetics shall pay in Dollars all royalties due to Astellas with respect to Net Sales of the *Reldesemtiv* Products in the *Reldesemtiv* Royalty Territory by Cytokinetics, its Affiliates and their respective licensees and sublicensees for such calendar quarter.

5.3 No Other Payments. Except as expressly set forth in this Agreement, neither Party shall have any payment obligation to the other Party with respect to *Reldesemtiv* and *Reldesemtiv* Product or any other FSRAs and FSRA Products.

5.4 Currency; Exchange Rate. All payments to be made by a Party to the other Party under this Agreement shall be made in Dollars by bank wire transfer in immediately available funds to a bank account designated by written notice from the Party that receives the payment. The rate of exchange to be used in computing the amount of currency equivalent in Dollars for calculating Net Sales shall be made at the average quarterly rate as published by Bloomberg (based on 20:00 Tokyo time) for the applicable quarterly reporting period for which the payment is due, or such other source as the Parties may agree in writing. Cytokinetics shall provide Astellas with written documentation of the applicable average quarterly rate, in English, along with the applicable royalty report under Section 5.2(d).

5.5 Late Payments. If a Party does not receive payment from the other Party of any sum due to it on or before the due date therefor, simple interest shall thereafter accrue on the sum due to such receiving Party from the due date until the date of payment at a [*] or the [*].

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

5.6 Taxes.

(a) Taxes on Income. Each Party shall be solely responsible for the payment of all taxes imposed on its share of income arising directly or indirectly from the activities of the Parties under this Agreement.

(b) Tax Cooperation. The Parties agree to cooperate with one another and use reasonable efforts to avoid or reduce tax withholding or similar obligations in respect of royalties and other payments made by a Party to the other Party under this Agreement. To the extent such paying Party is required to deduct and withhold taxes on any payment to the other Party, such paying Party shall pay the amounts of such taxes to the proper Governmental Authority in a timely manner, and the sum payable to such other Party shall be increased to the extent necessary to ensure that such other Party receives a sum equal to the sum which it would have received had there been no such withholding tax. Notwithstanding the foregoing, if the paying Party is obliged to pay withholding taxes and the other Party reasonably foresees that it will be able to utilize as a tax credit any amounts withheld or deducted by such paying Party, such other Party shall immediately so notify and, upon such notice, with respect to the amount in question, such paying Party will be released from the obligation to increase the amount pursuant to this Section 5.6. Such other Party shall provide such paying Party any tax forms that may be reasonably necessary in order for such paying Party to not withhold tax or to withhold tax at a reduced rate under an applicable bilateral income tax treaty, to the extent legally able to do so. Such other Party shall use reasonable efforts to provide any such tax forms to such paying Party in advance of the due date. Each Party shall provide the other with reasonable assistance (i) to enable the recovery, as permitted by Law, of withholding taxes or similar obligations resulting from payments made under this Agreement and (ii) in connection with any audit by any tax authority relating to this Agreement. In the event the paying Party increased the amount of its payment to the other Party to account for any withholding tax, and such other Party later utilizes any such amount withheld by such paying Party to achieve any tax saving for the benefit of such other Party in the form of a tax deduction, such other Party shall notify such paying Party in writing of the amount of such tax saving and such paying Party shall have the right to credit such amount of tax saving against its future payment obligations to such other Party.

5.7 Records and Audit Rights. Cytokinetics shall maintain complete and accurate records in sufficient detail to permit Astellas to confirm the accuracy of the amount of the Shared Development Cost, royalty payments and other amounts payable under this Agreement. Upon reasonable prior notice, such records shall be open during regular business hours for a period of [*] years from the creation of individual records for examination by an independent certified public accountant selected by Astellas and reasonably acceptable to Cytokinetics for the sole purpose of verifying for Astellas the accuracy of the financial reports furnished by Cytokinetics pursuant to this Agreement or of any payments made, or required to be made, by or to Cytokinetics pursuant to this Agreement. Such audits shall not occur more often than once each calendar year. Such auditor shall not disclose Cytokinetics' Confidential Information to Astellas, except to the extent such disclosure is necessary to verify the accuracy of the financial reports furnished by Cytokinetics or the amount of payments under this Agreement. Any amounts shown to be owed but unpaid shall be paid within [*] days after the accountant's report, plus interest (as set forth in Section 5.5) from the original due date. Astellas shall bear the full costs of such audit unless such audit reveals an overpayment to, or an underpayment by, Cytokinetics that resulted from a

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discrepancy in the financial report provided by Cytokinetics for the audited period, which underpayment or overpayment was more than [*] of the amount set forth in such report, in which case Cytokinetics shall reimburse Astellas for the costs for such audit. If any such overpayment exceeds such [*] amount, then Astellas shall refund such amount to Cytokinetics within [*] days after the accountant's report. On the other hand, if any such overpayment does not exceed such [*] amount, Astellas shall have the right to credit the amount of such overpayment against its future payment obligations to Cytokinetics, provided that such future payments are expected.

ARTICLE 6
Intellectual Property Rights

6.1 Ownership. In addition to the FSRA Collaboration IP assigned to Cytokinetics under Section 2.2(a), Cytokinetics shall solely own all information and materials, including discoveries, improvements, modifications, processes, methods, assay, designs, protocols, formulas, data, inventions, algorithms, forecasts, profiles, strategies, plans, results, coordinates for compound/apo protein structures, expression constructs, know-how and trade secrets, patentable or otherwise, that is discovered, generated, conceived and/or reduced to practice by or on behalf of Astellas for [*] after the Effective Date or by Cytokinetics (including its Affiliates, employees, agents and contractors), as a result of the Development, Manufacture or Commercialization of FSRAs and FSRA Products after the Effective Date, in each case including all rights, title and interest in and to the intellectual property rights therein and thereto (collectively, the "**FSRA Invention**").

6.2 Patent Prosecution and Enforcement. As between the Parties, Cytokinetics shall solely own and have the sole and exclusive right, at its discretion and expense, to prosecute, maintain and enforce any Patent Rights claiming any FSRA Invention, provided, however, that to the extent Astellas has prior to the Effective Date provided input in relation to any draft patent application, Cytokinetics shall provide Astellas with drafts of all proposed material filings and correspondences to any patent authorities with respect to such patents for Astellas' review and comment prior to the submission of such proposed filings and correspondences. Cytokinetics shall confer with Astellas and reasonably consider Astellas' comments prior to submitting such filings and correspondences, provided that Astellas shall provide such comments within [*] days of receiving the draft filings and correspondences from Cytokinetics. If Astellas does not provide comments within such period of time, then Astellas shall be deemed to have no comment to such proposed filings or correspondences.

ARTICLE 7
Confidentiality

7.1 Duty of Confidence. Subject to the other provisions of this Article 7:

(a) all Confidential Information of a Party (the "**Disclosing Party**") shall be maintained in confidence and otherwise safeguarded by the other Party (the "**Receiving Party**") and its Affiliates, using diligent efforts, but in any event no less than in the same manner and with the same protections as the Receiving Party maintains its own confidential information;

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

(b) the Receiving Party may only use any such Confidential Information for the purposes of performing its obligations or exercising its rights under this Agreement; and

(c) Cytokinetics may disclose Confidential Information of Astellas to: (i) its Affiliates, licensees, and sublicensees; and (ii) officers, employees, directors, agents, contractors, consultants and advisers of the Receiving Party and its Affiliates, licensees, and sublicensees, in each case to the extent reasonably necessary for the purposes of, and for those matters undertaken pursuant to, this Agreement; provided that such Persons are bound by legally enforceable obligations to maintain the confidentiality of the Confidential Information in a manner consistent with the confidentiality provisions of this Agreement.

7.2 Exceptions. The foregoing obligations as to particular Confidential Information of a Disclosing Party shall not apply to the extent that the Receiving Party can demonstrate through competent evidence that such Confidential Information:

(a) is known by the Receiving Party at the time of its receipt without an obligation of confidentiality, and not through a prior disclosure by the Disclosing Party, as documented by the Receiving Party's business records;

(b) is in the public domain before its receipt from the Disclosing Party, or thereafter enters the public domain through no fault of the Receiving Party;

(c) is subsequently disclosed to the Receiving Party by a Third Party who may lawfully do so and is not under an obligation of confidentiality to the Disclosing Party; or

(d) is developed by the Receiving Party independently and without use of or reference to any Confidential Information received from the Disclosing Party, as documented by the Receiving Party's business records.

No combination of features or disclosures shall be deemed to fall within the foregoing exclusions merely because individual features are published or available to the general public or in the rightful possession of the Receiving Party, unless the combination itself and principle of operation are published or available to the general public or in the rightful possession of the Receiving Party.

7.3 Authorized Disclosures. Notwithstanding the obligations set forth in Sections 7.1 and 7.4, a Party may disclose the other Party's Confidential Information (including this Agreement and the terms herein) to the extent:

(a) such disclosure: (i) is reasonably necessary for the filing or prosecuting Patent Rights as contemplated by this Agreement; (ii) is reasonably necessary in connection with regulatory filings for any FSRA or FSRA Product; (iii) is reasonably necessary for the prosecuting or defending litigation as contemplated by this Agreement; or (iv) is made to any Third Party bound by written obligation of confidentiality and non-use substantially consistent with to those set forth under this Article 7 (subject to subsection (b) below with respect to [*]), to the extent otherwise necessary or appropriate in connection with the exercise of its rights or the performance of its obligations hereunder;

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

(b) such disclosure is to [*], does not include the disclosure of Confidential Information relating to [*], and otherwise meets the requirements of subsection (a) above, in which case the Party [*] may agree with [*] of no less than [*]. Notwithstanding the foregoing, the [*] Party may request that the other Party grant a waiver to such requirement, which waiver shall not be unreasonably withheld or delayed and may be provided by e-mail. Each Party agrees to use diligent efforts to respond to a request for such a waiver within [*] Business Days.

(c) such disclosure is reasonably necessary: (i) to such Party's directors, attorneys, independent accountants or financial advisors for the sole purpose of enabling such directors, attorneys, independent accountants or financial advisors to provide advice to such Party, provided that in each such case on the condition that such directors, attorneys, independent accountants and financial advisors are bound by confidentiality and non-use obligations substantially consistent with those contained in this Agreement; or (ii) to actual or potential investors, acquirors, (sub)licensees and other financial or commercial partners solely for the purpose of evaluating or carrying out an actual or potential investment, acquisition or collaboration; provided that in each such case on the condition that such Persons are bound by confidentiality and non-use obligations substantially consistent with those contained in the Agreement; or

(d) such disclosure is required by judicial or administrative process, provided that in such event such Party shall promptly notify the other Party in writing of such required disclosure and provide the other Party an opportunity to challenge or limit the disclosure obligations. Confidential Information that is disclosed by judicial or administrative process shall remain otherwise subject to the confidentiality and non-use provisions of this Article 7, and the Party disclosing Confidential Information pursuant to law or court order shall take all steps reasonably necessary, including seeking of confidential treatment or a protective order, to ensure the continued confidential treatment of such Confidential Information.

7.4 Publicity; Use of Names.

(a) The Parties, either jointly or separately, will issue a press release after the execution of this Agreement in a form and timing that is mutually agreed by the Parties. No other disclosure of the existence or the terms of this Agreement may be made by either Party or its Affiliates except as provided in Section 7.3 and this Section 7.4. No Party shall use the name, trademark, trade name or logo of the other Party, its Affiliates or their respective employees in any publicity, promotion, news release or disclosure relating to this Agreement or its subject matter, except as provided in this Section 7.4 or with the prior express written permission of the other Party, except as may be required by applicable Law.

(b) A Party may disclose this Agreement in securities filings with the Securities Exchange Commission (the "**SEC**") or equivalent foreign agency to the extent required by applicable Law. In such event, the Party seeking such disclosure shall prepare a proposed redacted version of this Agreement to request confidential treatment for this Agreement, and the other Party agrees to promptly (and in any event, no less than [*] Business Days after receipt of such proposed redactions) give its input in a reasonable manner in order to allow the Party seeking disclosure to file its request within the time lines prescribed by applicable Law. The Party seeking such disclosure shall reasonably consider any comments thereto provided by the other Party within such [*] Business Day period.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

(c) Each Party acknowledges that the other Party may be legally required to make public disclosures (including in filings with the Governmental Authorities or by issuing a press release) of certain terms of or material developments or material information generated under this Agreement and agrees that each Party may make such disclosures as required by Law, provided that the Party seeking such disclosure first provides the other Party a copy of the proposed disclosure, and shall reasonably consider any comments thereto provided by the other Party within [*] days after the receipt of such proposed disclosure, provided that in no event shall the Party having such disclosure obligation be required to delay its disclosure in a manner that may cause such Party to violate any Law or incur any legal liability.

(d) Except for the public disclosure made pursuant to any press release issued pursuant to Section 7.4(c), the Parties agree that the portions of any other news release or other public announcement relating to this Agreement or the performance hereunder whether made jointly or separately that would disclose information other than that already in the public domain, shall first be reviewed and approved by both Parties (with such approval not to be unreasonably withheld or delayed). The Parties shall use reasonable efforts to coordinate the timing of such disclosures to be outside the trading hours of the NASDAQ and Tokyo stock markets, provided that neither Party shall be required to so delay such a disclosure where such delay would reasonably be expected to give rise to liability for or sanctions upon such Party in such Party's sole judgment.

(e) The Parties agree that after a disclosure or other public announcement is made pursuant to this Section 7.4, either Party may make subsequent public disclosures reiterating such information without having to obtain the other Party's prior consent or approval.

(f) Each Party agrees that the other Party shall have the right to use such first Party's name and logo in presentations, the company's website, collateral materials and corporate overviews to describe the relationship between the Parties under this Agreement, as well as in taglines of press releases issued pursuant to this Section 7.4.

7.5 Attorney-Client Privilege. Neither Party is waiving, nor shall be deemed to have waived or diminished, any of its attorney work product protections, attorney-client privileges or similar protections and privileges or the like as a result of disclosing information pursuant to this Agreement, or any of its Confidential Information (including Confidential Information related to pending or threatened litigation) to the Receiving Party, regardless of whether the Disclosing Party has asserted, or is or may be entitled to assert, such privileges and protections. The Parties: (a) share a common legal and commercial interest in such disclosure that is subject to such privileges and protections; (b) are or may become joint defendants in proceedings to which the information covered by such protections and privileges relates; (c) intend that such privileges and protections remain intact should either Party become subject to any actual or threatened proceeding to which the Disclosing Party's Confidential Information covered by such protections and privileges relates; and (d) intend that after the Effective Date both the Receiving Party and the Disclosing Party shall have the right to assert such protections and privileges.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

ARTICLE 8
Term

8.1 Term. The term of this Agreement shall commence upon the Effective Date and shall continue in full force and effect until the expiration of the *Reldesemtiv* Royalty Term on a product-by-product and country-by-country basis.

ARTICLE 9
Representations and Warranties

9.1 Representations and Warranties of Each Party. Each Party represents and warrants to the other Party as of the Effective Date that:

(a) it is duly organized and validly existing under the laws of its jurisdiction of incorporation or formation, and has full corporate or other power and authority to enter into this Agreement and to carry out the provisions hereof;

(b) it has the full right, power and authority to enter into this Agreement, to perform its obligations hereunder; and

(c) this Agreement has been duly executed by it and is legally binding upon it, enforceable in accordance with its terms, and does not conflict with any agreement, instrument or understanding, oral or written, to which it is a party or by which it may be bound, nor violate any material law or regulation of any court, governmental body or administrative or other agency having jurisdiction over it.

9.2 Additional Representations and Warranties by Astellas. Astellas represents and warrants to Cytokinetics as of the Effective Date that:

(a) it has not previously assigned, transferred, conveyed or otherwise encumbered its right, title and interest in any FSRA Collaboration IP or any Astellas FSRA Technology that Astellas is required to assign to Cytokinetics under Section 2.2(a) or license to Cytokinetics under Section 2.2(b) hereto;

(b) there are no Astellas FSRA Patents and all FSRA Collaboration Patents are listed on **Exhibit F**;

(c) it has the right to grant the license to Cytokinetics as purported to be granted under Section 2.2(b), and it has not granted any license, right or interest in, to or under any Astellas FSRA Technology or Collaboration Intellectual Property to any Third Party that is inconsistent with the license granted to Cytokinetics under Section 2.2(b);

(d) the transfer and delivery of the Clinical Materials, the API Inventory and other inventory delivered to Cytokinetics pursuant to Section 4.2(a) and/or Section 4.2(b) shall vest in Cytokinetics sole legal and beneficial ownership thereof, free from any and all encumbrances or rights of third parties;

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

(e) upon delivery to a carrier selected by Cytokinetics on the agreed date of delivery in accordance with the terms and conditions of Section 4.2(a) and/or Section 4.2(b), each of the (i) Clinical Materials and (ii) the inventories indicated as "Priority" on **Exhibit H** delivered to Cytokinetics under Section 4.2(a) and/or Section 4.2(b) (such inventories together with Clinical Materials, the **"Inventory"**) shall, in each case: (1) meet the applicable specifications as set forth in **Exhibit K**; (2) have been Manufactured in accordance with current Good Manufacturing Practices (unless labeled "non-cGMP" on **Exhibit H**); (3) have been Manufactured in accordance with all applicable Laws, including any Governmental Authority requirements then in effect, in all material respects; and (4) have not been adulterated or mislabeled, within the meaning of the United States Food, Drug and Cosmetic Act.; and

(f) **No Other Warranties.** EXCEPT AS EXPRESSLY STATED IN THIS ARTICLE 9, (A) NO REPRESENTATION, CONDITION OR WARRANTY WHATSOEVER IS MADE OR GIVEN BY OR ON BEHALF OF ASTELLAS OR CYTOKINETICS; AND (B) ALL OTHER CONDITIONS AND WARRANTIES WHETHER ARISING BY OPERATION OF LAW OR OTHERWISE ARE HEREBY EXPRESSLY EXCLUDED, INCLUDING ANY CONDITIONS AND WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT.

9.3 [*]**.** Notwithstanding anything to the contrary contained in this Agreement, [*] any of the representations and warranties contained in Sections [*]. For clarity, such [*] to (i) [*] and (ii) [*]. In addition, in no event shall such [*].

ARTICLE 10
Indemnification; Limitations of Liability

10.1 **Indemnification by Cytokinetics**. Cytokinetics shall indemnify and hold Astellas, its Affiliates, licensees, and sublicensees and their respective officers, directors, agents and employees ("**Astellas Indemnitees**") harmless from and against any Claims against them to the extent arising or resulting from:

(a) the Development, Manufacture, Commercialization or Medical Affairs Activities of FSRAs and/or FSRA Products by Cytokinetics or any of its Affiliates, licensees, sublicensees, distributors or contractors (other than Astellas, its Affiliates, licensees, sublicensees, distributors or contractors); or

(b) the negligence, recklessness or willful misconduct of any of the Cytokinetics Indemnitees; or

(c) the breach of any of the warranties or representations made by Cytokinetics to Astellas under this Agreement; or

(d) the breach by Cytokinetics of its obligations pursuant to this Agreement;

except in each case, to the extent such Claims result from the breach by any Astellas Indemnitee of any covenant, representation, warranty or other agreement made by Astellas in this Agreement or the negligence, recklessness or willful misconduct of any Astellas Indemnitee.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

10.2 Indemnification by Astellas. Astellas shall indemnify and hold Cytokinetics, its Affiliates, licensees, and sublicensees and their respective officers, directors, agents and employees ("**Cytokinetics Indemnitees**") harmless from and against any Claims arising under or related to this Agreement against them to the extent arising or resulting from:

(a) the Development, Manufacture, Commercialization or Medical Affairs Activities of FSRAs and/or FSRA Products by Astellas or any of its Affiliates, licensees, sublicensees, distributors or contractors (other than Cytokinetics, its Affiliates, licensees, sublicensees, distributors or contractors) conducted under the Collaboration Agreement before the Effective Date hereof;

(b) the negligence, recklessness or willful misconduct of any of the Astellas Indemnitees; or

(c) the breach of any of the warranties or representations made by Astellas to Cytokinetics under this Agreement; or

(d) any breach by Astellas of its obligations pursuant to this Agreement;

except in each case, to the extent such Claims result from the breach by any Cytokinetics Indemnitee of any covenant, representation, warranty or other agreement made by Cytokinetics in this Agreement or the negligence, recklessness or willful misconduct of any Cytokinetics Indemnitee.

10.3 Indemnification Procedure. If either Party is seeking indemnification under Sections 10.1 or 10.2 (the "**Indemnified Party**"), it shall inform the other Party (the "**Indemnifying Party**") of the Claim giving rise to the obligation to indemnify pursuant to such Section as soon as reasonably practicable after receiving notice of the Claim. The Indemnifying Party shall have the right to assume the defense of any such Claim for which it is obligated to indemnify the Indemnified Party. The Indemnified Party shall cooperate with the Indemnifying Party and the Indemnifying Party's insurer as the Indemnifying Party may reasonably request, and at the Indemnifying Party's cost and expense. The Indemnified Party shall have the right to participate, at its own expense and with counsel of its choice, in the defense of any Claim that has been assumed by the Indemnifying Party. Neither Party shall have the obligation to indemnify the other Party in connection with any settlement made without the Indemnifying Party's written consent, which consent shall not be unreasonably withheld or delayed. If the Parties cannot agree as to the application of Section 10.1 or 10.2 as to any Claim, pending resolution of the dispute pursuant to Section 11.6, the Parties may conduct separate defenses of such Claims, with each Party retaining the right to claim indemnification from the other Party in accordance with Section 10.1 or 10.2 upon resolution of the underlying Claim.

10.4 Mitigation of Loss. Each Indemnified Party shall take and shall procure that its Affiliates take all such reasonable steps and action as are reasonably necessary or as the Indemnifying Party may reasonably require in order to mitigate any Claims (or potential losses or damages) under this Article 10. Nothing in this Agreement shall or shall be deemed to relieve any Party of any common law or other duty to mitigate any losses incurred by it.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

10.5 Limitation of Liability. NEITHER PARTY SHALL BE LIABLE TO THE OTHER FOR ANY SPECIAL, CONSEQUENTIAL, INCIDENTAL, PUNITIVE, OR INDIRECT DAMAGES ARISING FROM OR RELATING TO ANY BREACH OF THIS AGREEMENT, REGARDLESS OF ANY NOTICE OF THE POSSIBILITY OF SUCH DAMAGES. NOTWITHSTANDING THE FOREGOING, NOTHING IN THIS SECTION 10.5 IS INTENDED TO OR SHALL LIMIT OR RESTRICT THE INDEMNIFICATION RIGHTS OR OBLIGATIONS OF ANY PARTY UNDER SECTION 9.3, 10.1 OR 10.2, OR DAMAGES AVAILABLE FOR A PARTY'S BREACH OF ITS OBLIGATIONS RELATING TO EXCLUSIVITY, CONFIDENTIALITY OR INTELLECTUAL PROPERTY HEREUNDER.

10.6 Insurance. Cytokinetics shall procure and maintain insurance, including product liability insurance, with respect to its activities hereunder and which is consistent with normal business practices of prudent companies similarly situated at all times during which any Collaboration Product is being clinically tested in human subjects or commercially distributed or sold. Cytokinetics shall provide Astellas with evidence of such insurance upon request and shall provide Astellas with written notice at least [*] days prior to the cancellation, non-renewal or material changes in such insurance. Such insurance shall not be construed to create a limit of either Party's liability with respect to its indemnification obligations under this Article 10.

ARTICLE 11
General Provisions

11.1 Force Majeure. Neither Party shall be held liable to the other Party nor be deemed to have defaulted under or breached this Agreement for failure or delay in performing any obligation under this Agreement to the extent such failure or delay is caused by or results from causes beyond the reasonable control of the affected Party, potentially including embargoes, war, acts of war (whether war be declared or not), acts of terrorism, insurrections, riots, civil commotions, strikes, lockouts or other labor disturbances, fire, floods, earthquakes or other acts of God, or acts, generally applicable action or inaction by any governmental authority (but excluding any government action or inaction that is specific to such Party, its Affiliates or sublicensees, such as revocation or non-renewal of such Party's license to conduct business), or omissions or delays in acting by the other Party, or unavailability of materials related to the Manufacture of FSRAs or FSRA Products. The affected Party shall notify the other Party in writing of such force majeure circumstances as soon as reasonably practical, and shall promptly undertake and continue diligently all reasonable efforts necessary to cure such force majeure circumstances or to perform its obligations in spite of the ongoing circumstances.

11.2 Assignment. This Agreement may not be assigned or otherwise transferred, nor may any right or obligation hereunder be assigned or transferred, by either Party without the prior written consent of the other Party. Notwithstanding the foregoing, either Party may, without consent of the other Party, assign this Agreement and its rights and obligations hereunder in whole or in part to an Affiliate of such Party, or in whole to its successor-in-interest in connection with the sale of all or substantially all of its stock or its assets to which this Agreement relates, or in connection with a merger, acquisition or similar transaction. Any attempted assignment not in accordance with this Section 11.2 shall be null and void and of no legal effect. Any permitted assignee shall assume all assigned obligations of its assignor under this Agreement. The terms and conditions of this Agreement shall be binding upon, and shall inure to the benefit of, the Parties and their respected successors and permitted assigns.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

11.3 **Severability.** If any one or more of the provisions contained in this Agreement is held invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions contained herein shall not in any way be affected or impaired thereby, unless the absence of the invalidated provision(s) adversely affects the substantive rights of the Parties. The Parties shall in such an instance use their best efforts to replace the invalid, illegal or unenforceable provision(s) with valid, legal and enforceable provision(s) which, insofar as practical, implement the purposes of this Agreement.

11.4 **Notices.** All notices which are required or permitted hereunder shall be in writing and sufficient if delivered personally, sent by facsimile (and promptly confirmed by personal delivery, registered or certified mail or overnight courier), sent by nationally-recognized overnight courier or sent by registered or certified mail, postage prepaid, return receipt requested, addressed as follows:

If to Cytokinetics:

Cytokinetics, Inc.
280 East Grand Avenue
South San Francisco, CA 94080
USA
Attn: President
Fax: 650-624-3010
Copy to: General Counsel

with a copy to:

Cooley LLP
3175 Hanover Street
Palo Alto, CA 94304
USA
Attn: Robert L. Jones, Esq.
Fax: (650) 849-7400

If to Astellas:

Astellas Pharma Inc.
2-5-1, Nihonbashi-Honcho
Chuo-ku, Tokyo 103-8411
Japan
Attn: Senior Vice President, Business Development
Fax: 81-3-5203-7164

with a copy to:

Astellas Pharma Inc.
2-5-1, Nihonbashi-Honcho
Chuo-ku, Tokyo 103-8411
Japan
Attn: Vice President, Legal
Fax: 81-3-3244-5811

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or to such other address(es) as the Party to whom notice is to be given may have furnished to the other Party in writing in accordance herewith. Any such notice shall be deemed to have been given: (a) when delivered if personally delivered or sent by facsimile on a Business Day (or if delivered or sent on a non-Business Day, then on the next Business Day); (b) on the fifth (5th) Business Day after dispatch if sent by nationally-recognized overnight courier; or (c) on the tenth (10th) Business Day following the date of mailing, if sent by mail.

11.5 Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of [*] and the patent laws of the United States without reference to any rules of conflict of laws. The application of the United Nations Convention on the International Sale of Goods to this Agreement or the performance thereof is expressly excluded.

11.6 Dispute Resolution. The Parties shall negotiate in good faith and use reasonable efforts to settle any dispute, controversy or claim arising from or related to this Agreement or the breach thereof. If the Parties do not fully settle, and a Party wishes to pursue the matter, each such dispute, controversy or claim shall be finally shall be settled by binding arbitration administered by [*] pursuant to its [*] then in effect (the **"**[*] **Rules"**), except as otherwise provided herein. The arbitration shall be governed by the United States Federal Arbitration Act, 9 U.S.C. §§ 1-16, to the exclusion of any inconsistent state laws. The U.S. Federal Rules of Civil Procedure shall govern discovery and the U.S. Federal Rules of Evidence shall govern evidence for the arbitration. The arbitration will be conducted in San Francisco, California and the Parties consent to the personal jurisdiction of the United States federal courts, for any case arising out of or otherwise related to this arbitration, its conduct and its enforcement. Any situation not expressly covered by this Agreement shall be decided in accordance with the [*] Rules. The arbitrator shall be one (1) neutral, independent and impartial arbitrator selected from a pool of retired federal judges to be presented to the Parties by [*]. Failing the agreement of the Parties as to the selection of the arbitrator within [*] days, the arbitrator shall be appointed by [*] in accordance with the [*] Rules. Notwithstanding any other provision of this Section 11.6, either Party shall have the right to seek and be granted exigent, injunctive or temporary relief in any court of competent jurisdiction.

11.7 Entire Agreement; Amendments. This Agreement, together with the Exhibits hereto, contains the entire understanding of the Parties with respect to the subject hereof. Any other express or implied agreements and understandings, negotiations, writings and commitments (including the Collaboration Agreement), either oral or written, in respect to the subject hereof are superseded by the terms of this Agreement. The Exhibits to this Agreement are incorporated herein by reference and shall be deemed a part of this Agreement. This Agreement may be amended, or any term hereof modified, only by a written instrument duly executed by authorized representative(s) of both Parties hereto.

11.8 Headings. The captions to the several Articles, Sections and subsections hereof are not a part of this Agreement, but are merely for convenience to assist in locating and reading the several Articles and Sections hereof.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

11.9 Independent Contractors. Cytokinetics and Astellas are independent contractors and that the relationship between the two Parties shall not constitute a partnership, joint venture or agency. Neither Cytokinetics nor Astellas shall have the authority to make any statements, representations or commitments of any kind, or to take any action, which shall be binding on the other Party, without the prior written consent of the other Party.

11.10 Waiver. The waiver by either Party hereto of any right hereunder, or of any failure of the other Party to perform, or of any breach by the other Party, shall not be deemed a waiver of any other right hereunder or of any other breach by or failure of such other Party whether of a similar nature or otherwise.

11.11 Cumulative Remedies. [*], no remedy referred to in this Agreement is intended to be exclusive, but each shall be cumulative and in addition to any other remedy referred to in this Agreement or otherwise available under law.

11.12 Waiver of Rule of Construction. Each Party has had the opportunity to consult with counsel in connection with the review, drafting and negotiation of this Agreement. Accordingly, no ambiguity in this Agreement shall be strictly construed against either Party.

11.13 Business Day Requirements. In the event that any notice or other action or omission is required to be taken by a Party under this Agreement on a day that is not a Business Day then such notice or other action or omission shall be deemed to be required to be taken on the next occurring Business Day.

11.14 Translations. This Agreement is in the English language only, which language shall be controlling in all respects, and all versions hereof in any other language shall be for accommodation only and shall not be binding upon the Parties. All communications and notices to be made or given pursuant to this Agreement, and any dispute proceeding related to or arising hereunder, shall be in the English language. If there is a discrepancy between any translation of this Agreement and this Agreement, this Agreement shall prevail.

11.15 Further Actions. Each Party agrees to execute, acknowledge and deliver such further instruments, and to do all such other acts, as necessary or appropriate in order to carry out the purposes and intent of this Agreement.

11.16 Counterparts. This Agreement may be executed in two or more counterparts by original signature, facsimile or PDF files, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

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[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

IN WITNESS WHEREOF, the Parties intending to be bound have caused this Fast Skeletal Regulatory Activator Agreement to be executed by their duly authorized representatives as of the Effective Date.

Cytokinetics, Inc.

By: _____
Name: Robert I. Blum
Title: President and CEO

Astellas Pharma Inc.

By: _____
Name: Ken Kubota
Title: Corporate Vice President,
Head of Business Development

LIST OF EXHIBITS

Exhibit A: **[Intentionally Omitted]**
Exhibit B: **Chemical Name of CK-601**
Exhibit C: **Clinical Trial Plan and Budget for CY 5031**
Exhibit D: **Criteria for Fast Skeletal Regulatory Activator**
Exhibit E: [*] **Patent Rights**
Exhibit F: **FSRA Collaboration Patents Filed as of the Effective Date**
Exhibit G: **Regulatory and Other Documents; Data; Know-How; Information relating to FSRAs and FSRA Products**
Exhibit H: **Inventory**
Exhibit I: **List of Agreements**
Exhibit J: **Publications**
Exhibit K: **Specifications of Inventory**
Exhibit L: [*]

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

Exhibit B
Chemical Name of CK-601

[*]

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

Exhibit C
Clinical Trial Plan and Budget for CY 5031

[*]

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

Exhibit D
Criteria for Fast Skeletal Regulatory Activator

[*]

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

Exhibit E

[*] Patent Rights

[*]

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

Exhibit F

FSRA Collaboration Patents Filed as of the Effective Date

[*]

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

Exhibit G
Regulatory and Other Documents; Data; Know-How; Information relating to FSRAs and FSRA Products

[*]

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

Exhibit H
Inventory

The inventories for the following batches are “Priority”:
[*]

[*]

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

Exhibit I
List of Agreements

[*]

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

Exhibit J

Publications

[*]

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

Exhibit K
Specifications of Inventory

[*]

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

Exhibit L

[*]

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

License and Collaboration Agreement

for Other Skeletal Sarcomere Activators

by and between

Cytokinetics, Inc.

and

Astellas Pharma Inc.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

LICENSE AND COLLABORATION AGREEMENT FOR OTHER SKELETAL SARCOMERE ACTIVATORS

This LICENSE AND COLLABORATION AGREEMENT FOR OTHER SKELETAL SARCOMERE ACTIVATORS (this "**Agreement**") is made as of April 23, 2020 (the "**Effective Date**"), by and between **Cytokinetics, Inc.**, a corporation organized and existing under the laws of Delaware, having its principal place of business at 280 East Grand Avenue, South San Francisco, CA 94080, USA ("**Cytokinetics**"), and **Astellas Pharma Inc.**, a corporation organized and existing under the laws of Japan, having its registered office at 2-5-1, Nihonbashi-Honcho, Chuo-ku, Tokyo 103-8411, Japan ("**Astellas**"). Astellas and Cytokinetics are referred to in this Agreement individually as a "**Party**" and collectively as the "**Parties**."

RECITALS

WHEREAS, Cytokinetics is a biopharmaceutical company directed to the research and development of small molecule compounds that modulate muscle function, and owns certain patents and know-how relating to skeletal muscle sarcomere activators;

WHEREAS, Astellas is a pharmaceutical company working to create and develop novel therapies;

WHEREAS, Cytokinetics and Astellas are parties to a License and Collaboration Agreement, dated June 21, 2013, as amended and restated on December 22, 2014, as further amended on July 27, 2016 (the "**July 2016 Amendment**"), April 11, 2017, December 21, 2017, and May 15, 2018 (the License and Collaboration Agreement, as so amended, the "**Existing Agreement**");

WHEREAS, the Parties wish to terminate their collaboration with respect to all Fast Skeletal Regulatory Activators and limit the scope of their collaboration to the Other Skeletal Sarcomere Activators;

WHEREAS, in furtherance of the foregoing, the Parties wish to amend and restate the Existing Agreement in its entirety with: (a) a Fast Skeletal Regulatory Activator Agreement entered into by the Parties dated as the date hereof, which sets forth the termination and/or expiration of Astellas' rights to all Fast Skeletal Regulatory Activators under the Collaboration (as defined in the Existing Agreement) (including the license to Astellas for *reldesemtiv* and CK-3762601 and the option to Astellas for Tirasemtiv), subject to the terms and conditions therein (the "**FSRA Agreement**"); and (b) this Agreement, which sets forth the terms and conditions under which the Parties will continue their collaboration with respect to the Other Skeletal Sarcomere Activators.

NOW, THEREFORE, in consideration of the foregoing premises and the mutual covenants contained herein, the receipt and sufficiency of which are hereby acknowledged, Astellas and Cytokinetics hereby agree as follows:

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

ARTICLE 1
DEFINITIONS

The terms in this Agreement with initial letters capitalized shall have the meanings set forth below, or the meaning as designated in the indicated places throughout this Agreement.

1.1 "**Active Ingredient**" means the clinically active material(s) that provide pharmacological activity in a pharmaceutical product (excluding formulation components such as coatings, stabilizers, excipients or solvents, adjuvants or controlled release technologies).

1.2 "[*] **Indications**" means any [*] Indication(s) [*] pursuant to Section [*].

1.3 "[*] **Indication**" means: (a) as of the Effective Date, any of the Indications set forth on **Exhibit L**; and (b) any [*] Indication that may be added to **Exhibit L** as [*] Indication during the Term by written agreement of the Parties.

1.4 "**Affiliate**" means, with respect to a Party, any Person that controls, is controlled by, or is under common control with that Party. For the purpose of this definition only, "control" (including, with correlative meaning, the terms "controlled by" and "under the common control") means the actual power, either directly or indirectly through one or more intermediaries, to direct or cause the direction of the management and policies of such Person, whether by the ownership of more than fifty percent (50%) of the voting stocking of such Person, by contract or otherwise.

1.5 "[*]" means [*].

1.6 "**Astellas Know-How**" means all Know-How that is (a) Controlled by Astellas or its Affiliates during the Term and (b) reasonably necessary or useful for the Research, Development, Manufacture, Commercialization or Medical Affairs Activities of any Compound and/or Collaboration Product, provided, however, that Astellas Know-How specifically excludes Collaboration Know-How.

1.7 "**Astellas Patents**" means any Patent Right that is (a) Controlled by Astellas or its Affiliates during the Term and (b) reasonably necessary or useful for the Research, Development, Manufacture, Commercialization or Medical Affairs Activities of any Compound and/or Collaboration Product, provided, however, that Astellas Patents specifically exclude Collaboration Patents. The Astellas Patents existing as of the Effective Date are listed in **Exhibit A.**

1.8 "**Astellas Technology**" means Astellas Know-How and Astellas Patents.

1.9 "**Astellas Territory**" means worldwide other than the Shared Territory.

1.10 "**Business Day**" means a day other than a Saturday, Sunday or a day that is a statutory holiday in Japan or a bank holiday in New York, USA.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

1.11 "**Claims**" means all Third Party demands, claims, actions, proceedings and liability (whether criminal or civil, in contract, tort or otherwise) for losses, damages, reasonable legal costs and other reasonable expenses of any nature.

1.12 "**CMC Activities**" means the chemistry, manufacturing, control and other activities necessary or useful for generating the CMC Information required for Marketing Approval of the Collaboration Products, including Manufacture of validation and/or clinical trial materials, which are necessary or useful to obtain Marketing Approval of the Collaboration Products.

1.13 **"CMC Information"** means information related to the chemistry, manufacturing and controls of a Compound or a Collaboration Product, as specified by FDA, EMA or other applicable Regulatory Authority.

1.14 **"Collaboration"** means the collaboration of the Parties with respect to the Research in the Field and Development, Manufacture, Commercialization and Medical Affairs Activities of the Compounds and Collaboration Products in the Collaboration Indications, as and to the extent set forth in this Agreement.

1.15 "**Collaboration Indications**" means (a) [*] Indications, (b) Licensed Indications, and (c) any [*] Indications.

1.16 "**Collaboration Intellectual Property**" means any information and materials, including discoveries, improvements, modifications, processes, methods, assay, designs, protocols, formulas, data, inventions, algorithms, forecasts, profiles, strategies, plans, results, coordinates for compound/apo protein structures, expression constructs, know-how and trade secrets, patentable or otherwise, that is discovered, generated, conceived and/or reduced to practice by or on behalf either Party (including its Affiliates, employees, agents and contractors), whether solely or jointly, as a result of: (a) the performance of its activities under the Research Plan and/or (b) the performance of its activities under the Development Plan [*], in each case including all rights, title and interest in and to the intellectual property rights therein and thereto.

1.17 "**Collaboration Know-How**" means Know-How that is within the Collaboration Intellectual Property.

1.18 "**Collaboration Patents**" means Patent Rights that claim any Collaboration Intellectual Property, provided that any Patent Rights [*] Collaboration Patents.

1.19 "**Collaboration Product**" means any pharmaceutical product containing a Compound, alone or in combination with other Active Ingredients, in any formulation or dosage form and for any mode of administration, but for clarity any such other Active Ingredient shall not be any compound that is proprietary to Cytokinetics that is not subject to the license to Astellas under this Agreement.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

1.20 "**Commercialize**" or "**Commercialization**" means all activities directed to marketing, promoting, advertising, exhibiting, distributing (including management of wholesalers), detailing or selling a Collaboration Product in the Field (including importing and exporting activities in connection therewith). For the avoidance of doubt, Commercialization does not include Medical Affairs Activities.

1.21 "**Committee**" means the JSC, JRC, JDC, JMC, JCC, JMAC, [*] or JPC, as applicable.

1.22 "**Compound**" means any [*] Activator.

1.23 "**Compound Criteria**" means the criteria listed in **Exhibit B** for each of [*] Activators, [*] Activators and [*] Activators.

1.24 "**Confidential Information**" of a Party means all Know-How, unpublished patent applications and other non-public information and data of a financial, commercial, business, operational or technical nature of such Party that is disclosed by or on behalf of such Party or any of its Affiliates or otherwise made available to the other Party or any of its Affiliates, in each case in connection with this Agreement, whether made available orally, visually, in writing or in electronic form. To the extent that Cytokinetics discloses to Astellas and/or its Affiliates any information relating to any [*] (such disclosure to be made at Cytokinetics' sole discretion), such information shall also be deemed Confidential Information. Collaboration Intellectual Property shall be deemed Confidential Information of both Parties.

1.25 "**Control**" or "**Controlled**" means, with respect to any Know-How, Patent Rights or other intellectual property rights, that a Party has the legal authority or right (whether by ownership, license or otherwise) to grant a license, sublicense, access or right to use (as applicable) under such Know-How, Patent Rights, or other intellectual property rights to the other Party on the terms and conditions set forth herein, in each case without breaching the terms of any agreement with a Third Party.

1.26 "**Co-Promote**" and "**Co-Promotion**" means the promotional activities relating to the Collaboration Products directed to healthcare professionals or otherwise in furtherance of the Commercialization of the Collaboration Products to be conducted by Cytokinetics (whether alone or together with Astellas with respect to a particular Collaboration Product in a particular Indication) in the Co-Promotion Territory or Shared Territory in the event Cytokinetics exercises its rights under Section 9.6. For clarity, if [*] with respect to a particular [*] in accordance with Section [*] shall also be referred to as Co-Promote or Co-Promotion for the purpose of this Agreement.

1.27 "**Co-Promotion Territory**" means: (a) the U.S.; and (b) Canada.

1.28 "**Cytokinetics Commercialization Period**" means, on a [*], in the event [*] for a Collaboration Product with respect to [*] for which such Collaboration Product [*], and at the time of such [*] such Collaboration Product has [*] for any [*] Indication, [*] Indication or [*] Indication for which [*] such Collaboration Product is [*] if and when such Collaboration Product is [*] for any [*] Indication, for which [*].

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

1.29 "**Cytokinetics Know-How**" means all Know-How that is (a) Controlled by Cytokinetics or its Affiliates during the Term and (b) reasonably necessary or useful for the Research, Development, Manufacture, Commercialization or Medical Affairs Activities of any Compound and/or Collaboration Product, provided, however, that Cytokinetics Know-How specifically excludes Collaboration Know-How.

1.30 "**Cytokinetics Patents**" means any Patent Right that is (a) Controlled by Cytokinetics or its Affiliates during the Term and (b) reasonably necessary or useful for the Research, Development, Manufacture, Commercialization or Medical Affairs Activities of any Compound and/or Collaboration Product, provided, however, that Cytokinetics Patents specifically exclude Collaboration Patents. The Cytokinetics Patents existing as of the Effective Date are listed in **Exhibit C**. For clarity, Cytokinetics Patents shall include any Patent Rights arising after the Effective Date that [*].

1.31 "**Cytokinetics Technology**" means Cytokinetics Patents and Cytokinetics Know-How.

1.32 "**Develop**" or "**Development**" means all development activities for any Compound or Collaboration Product that are directed to obtaining Marketing Approval(s) of the Collaboration Products, including: all non-clinical, preclinical and clinical activities, testing and studies of such Compound or Collaboration Product (including IND-Enabling Studies and translational research); manufacturing development, process and formulation development; toxicology, pharmacokinetic, pharmacodynamic, drug-drug interaction, safety, tolerability and pharmacological studies; distribution of such Compound or Collaboration Product for use in clinical trials (including placebos and comparators); statistical analyses; assay development; instrument design and development; protocol design and development; quality assurance and control; report writing; and the preparation, filing and prosecution of any MAA for such Collaboration Product; development activities directed to label expansion (including prescribing information) and/or obtaining Marketing Approval for one or more additional Indications or patient populations following initial Marketing Approval; development activities conducted after receipt of Marketing Approval which were a condition for the receipt of such Marketing Approval; and all regulatory activities related to any of the foregoing.

1.33 "**Development Costs**" means the [*] costs incurred by or on account of a Party in performing Development in accordance with the Development Plan.

1.34 "**Diligent Efforts**" means: (a) where applied to carrying out specific tasks and obligations of a Party under this Agreement, expending [*] to accomplish such task or obligation as such Party (on its own and/or acting through any of its Affiliates, sublicensees or subcontractors) would [*]; and (b) where applied to the Research, Development, Manufacture, and/or Commercialization of, or Medical Affairs Activities for, a Compound or Collaboration Product, the use of [*] in an [*], as [*], taking into account relevant factors including, without limitation, [*] and other relevant factors, including [*]. "Diligent Efforts" shall require that such Party (on its own and/or acting through any of its Affiliates, sublicensees or subcontractors), at a minimum: (i) promptly assign responsibility for such obligations to

qualified personnel, set annual goals and objectives for carrying out such obligations, and monitor and hold personnel accountable for progress with respect to such goals and objectives; (ii) set and seek to achieve specific and meaningful objectives for carrying out such obligations, with timelines consistent with a comparable [*] program; and (iii) make and implement decisions and [*] designed to [*] with respect to such objectives.

1.35 "**Dollars**" means the U.S. dollar, and **"$"** shall be interpreted accordingly.

1.36 **"EMA"** means the European Medicines Agency or any successor entity thereto.

1.37 **"EU"** or the **"European Union"** means the European Union and its member states as of the Effective Date, which are: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxemburg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, and Spain, Sweden, and (b) the United Kingdom, Norway, Iceland, Liechtenstein, Andorra, Monaco, San Marino and the Vatican, and each of their successors to the extent such successors occupy the same territory. For clarity, any of the named countries in subsection (a) shall remain part of the EU for the purpose of this Agreement regardless of whether they remain a member state of the EU.

1.38 **"**[*] **Indication**" means any [*] Indication [*] pursuant to Section [*].

1.39 **"**[*] **Activator**" means (a) any small molecule compound that (i) is [*], (ii) has a specified level of stimulatory activity against any [*], as set forth in the applicable Compound Criteria, and (iii) the [*]; and (b) any [*] in subclause (a) above.

1.40 "**Fast Skeletal Regulatory Activator**" means, subject to the final sentence of this paragraph, (a) any small molecule compound that (i) is [*] (ii) has a specified level of stimulatory activity against any [*], as set forth in the applicable Compound Criteria, and (iii) the [*]; and (b) any [*] in subclause (a) above. Fast Skeletal Regulatory Activators exclude all [*].

1.41 "**FDA**" means the United States Food and Drug Administration or any successor entity thereto.

1.42 "**Field**" means the treatment, prevention and/or amelioration of any diseases and medical conditions in humans.

1.43 "**Filing**" of an MAA means the acceptance by a Regulatory Authority of an MAA for filing and review, if applicable, or otherwise the submission of such MAA.

1.44 "**First Commercial Sale**" means, with respect to any Collaboration Product in any country or jurisdiction, the first sale of such Collaboration Product to a Third Party for distribution, use or consumption in such country or jurisdiction after the Marketing Approvals have been obtained for such Collaboration Product in such country or jurisdiction.

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1.45 "**FTE**" means the equivalent of a full-time individual's work for a twelve (12) month period (consisting of a total of [*] hours per year of dedicated effort). Any person who devotes more or less than [*] hours per year on the applicable activities shall be treated as an FTE on a pro-rata basis, based upon the actual number of hours worked by such person on such activities, divided by [*]. For avoidance of doubt, the hours allocated to the work of general corporate or administrative personnel shall not be incorporated into FTE.

1.46 "**FTE Rate**" means an initial rate of [*] dollars [*] per FTE per year for Cytokinetics, which shall apply through [*]. Thereafter, the FTE Rate shall be changed annually on a calendar year basis to reflect any year-to-year percentage increase or decrease (as the case may be) in the Consumer Price Index for All Urban Consumers for the U.S., as published by the U.S. Department of Labor, Bureau of Labor Statistics ("**CPI**") (based on the change in the CPI from the most recent index available as of the Effective Date to the most recent index available as of the date of the calculation of such revised FTE Rate). The FTE Rate applicable to [*] shall be subject to the adjustment set forth in Section [*].

1.47 "**GAAP**" means the U.S. generally accepted accounting principles.

1.48 "**Generic Product**" means, with respect to a Collaboration Product in a particular country, any pharmaceutical product that (a) contains the same Active Ingredients and formulation as such Collaboration Product; (b) [*] in such country and [*] in such country; and (c) is sold in such country by a Third Party that is not a sublicensee of Astellas or its Affiliates and did not purchase such product in a chain of distribution that included any of Astellas or its Affiliates or sublicensees.

1.49 "**Governmental Authority**" means any federal, state, national, state, provincial or local government, or political subdivision thereof, or any multinational organization 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).

1.50 "**IFRS**" means International Financial Reporting Standards.

1.51 "**IND**" means any investigational new drug application, clinical trial application, clinical trial exemption or similar or equivalent application or submission for approval to conduct human clinical investigations filed with or submitted to a Regulatory Authority in conformance with the requirements of such Regulatory Authority.

1.52 "**IND-Enabling Studies**" means studies that are specifically required for an IND, including ADME (absorption, distribution, metabolism, and excretion), GLP toxicology studies, or studies required for the preparation of the CMC section of an IND, including studies related to analytical methods and purity analysis, and formulation and manufacturing development studies, all as necessary to obtain the permission of Regulatory Authorities to begin human clinical investigations.

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1.53 "**Indication**" means any human diseases, syndromes and medical conditions that can be diagnosed, treated, prevented or ameliorated.

1.54 "**Initiate**" or "**Initiation**" means, with respect to a clinical trial of a Collaboration Product, the first dosing of the first human subject for such clinical trial.

1.55 "**Know-How**" means any information and materials, including discoveries, improvements, modifications, processes, methods, assays, designs, protocols, formulas, data, inventions, algorithms, forecasts, profiles, strategies, plans, results, coordinates for compound/apo protein structures, expression constructs, know-how and trade secrets (in each case, patentable, copyrightable or otherwise), but excluding any Patent Rights.

1.56 "**Law**" means any federal, state, local, foreign or multinational law, statute, standard, ordinance, code, rule, regulation, resolution or promulgation, or any order by any Governmental Authority, or any license, franchise, permit or similar right granted under any of the foregoing, or any similar provision having the force or effect of law, including any privacy protection regulations and guidelines, such as the General Data Protection Regulation approved by the EU Parliament on April 14, 2016 and enforced on May 25, 2018 and any amendments or successor thereto.

1.57 **"Licensed Indications**" means the following Indications: (a) [*] non-neurological and non-neuromuscular diseases and conditions (e.g., [*].

1.58 "**MAA**" or "**Marketing Authorization Application**" means an application to the appropriate Regulatory Authority for approval to commercially sell a Collaboration Product (but excluding pricing approval) in the Field in a particular jurisdiction (including, without limitation, a New Drug Application in the U.S.) and all amendments and supplements thereto.

1.59 "**Major EU Market Countries**" means [*].

1.60 "**Major Market Countries**" means the [*].

1.61 "**Manufacture**" and "**Manufacturing**" mean activities directed to manufacturing, processing, filling, finishing, packaging, labeling, quality control, quality assurance testing and release, post-marketing validation testing, inventory control and management, storing and transporting any Compound and/or Collaboration Product.

1.62 "**Manufacturing Costs**" means, with respect to a particular Compound or Collaboration Product Manufactured and supplied by a Party pursuant to the Development Plan:

(a) if such Compound or Collaboration Product is Manufactured by such Party's Third Party manufacturer, [*] costs incurred by such Party in association therewith, including for [*] with respect thereto;

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

(b) if such Compound or Collaboration Product is Manufactured by such Party itself, [*] including without limitation [*] manufacturing costs. Such [*] of Compound or Collaboration Product [*] and (ii) in accordance with IFRS (in the case of Astellas) or GAAP (in the case of Cytokinetics) consistently applied.

1.63 "**Marketing Approval**" means all approvals necessary for the commercial sale of a Collaboration Product in the Field in a given country or regulatory jurisdiction.

1.64 **"Medical Affairs Activities"** means activities, in compliance with all the applicable Law, designed to ensure or improve appropriate medical use of, conduct medical education regarding, or further research regarding, the Compounds and the Collaboration Products or to increase disease state awareness, including by way of example: (a) activities of medical scientific liaisons, which shall mean the following functions: (x) conduct of service based medical activities including providing input and assistance with consultancy meetings, recommending investigators for clinical trials and providing input in the design of such trials and other research related activities, and (y) delivery of non-promotional communications and conduct of non-promotional activities including presenting new clinical trial data and other scientific or disease state awareness information; (b) grants to support continuing medical education, symposia, or Third Party research related to Collaboration Products; (c) development, publication and dissemination of publications relating to the Compounds and the Collaboration Products and relevant disease states; (d) medical information services provided in response to inquiries communicated via sales representatives or received by letter, phone call or email; (e) conducting advisory board meetings or other consultant programs; (f) support of investigator-initiated trials; (g) managing relationships with cooperative groups, physician/hospital networks and disease state or patient and caregiver advocacy groups; (h) establishing and implementing risk, evaluation and mitigation strategies, (i) voluntary phase 4 trials or post-approval patient registries, (j) health economic and outcomes research (HEOR) activities, (k) independent medical education activities, and (l) non-promotional exhibiting at medical and scientific fora. For the purposes of clarity, post-approval clinical studies within the approved Indications, which were a condition for the receipt of Marketing Approval, shall be included within Development and shall not be included within Medical Affairs Activities.

1.65 "**Net Sales**" means the gross amount billed or invoiced by or for the benefit of Astellas, its Affiliates, and its sublicensees to independent, unrelated persons in bona fide arm's length transactions with respect to a Collaboration Product, less the following deductions, as allocable to such Collaboration Product (if not previously deducted from the amount invoiced):

(a) [*];

(b) [*];

(c) [*];

(d) [*]; and

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

(e) [*].

If a single item falls into more than one of the categories set forth in clauses (a)-(e) above, such item may not be deducted more than once.

Sales between Astellas and its Affiliates and sublicensees shall be disregarded for purposes of calculating Net Sales except if such purchaser is a distributor, pharmacy or end user.

If a Collaboration Product either (i) is sold in the form of a combination product containing both a Compound and one or more Active Ingredient(s) as separate molecular entity(ies) that are not Compounds; or (ii) is sold in a form that contains (or is sold bundled with) a delivery device therefor (in either case ((i) or (ii)), a "**Combination Product**"), the Net Sales of such Collaboration Product for the purpose of calculating royalties and sales-based milestones owed under this Agreement for sales of such Collaboration Product, shall be determined as follows: first, Astellas shall determine the actual Net Sales of such Combination Product (using the above provisions) and then such amount shall be multiplied by the fraction A/(A+B), where A is the invoice price of such Collaboration Product, if sold separately, and B is the total invoice price of other Active Ingredient or delivery device in such Combination Product if sold separately. If any other Active Ingredient or delivery device in such Combination Product is not sold separately, Net Sales shall be calculated by multiplying actual Net Sales of such Combination Product by a fraction A/C where A is the invoice price of such Collaboration Product if sold separately, and C is the invoice price of such Combination Product. If neither such Collaboration Product nor any other Active Ingredient (or delivery device) in such Combination Product is sold separately, the adjustment to Net Sales shall be determined by the Parties in good faith to reasonably reflect the fair market value of the contribution of such Collaboration Product in such Combination Product to the total fair market value of such Combination Product.

With respect to any sale of any Collaboration Product in a given country for any substantive consideration other than monetary consideration on arm's length terms (which has the effect of reducing the invoiced amount below what it would have been in the absence of such non-monetary consideration), for purposes of calculating the Net Sales, such Collaboration Product shall be deemed to be sold exclusively for cash at the average Net Sales price charged to Third Parties for cash sales of such Collaboration Product in such country during the applicable reporting period (or if there were only *de minimis* cash sales in such country, at the fair market value as determined in good faith based on pricing in comparable markets). Notwithstanding the foregoing, Net Sales shall not include amounts (whether actually existing or deemed to exist for purposes of calculation) for Collaboration Products distributed for use in clinical trials.

Net Sales shall be calculated on an accrual basis, in a manner consistent with Astellas' accounting policies for external reporting purposes, as consistently applied, in accordance with IFRS. To the extent any accrued amounts used in the calculation of Net Sales are estimates, such estimates shall be trued-up in accordance with Astellas' accounting policies for external reporting purposes, as consistently applied, and Net Sales and related payments under this Agreement shall be reconciled as appropriate.

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1.66 "[*] **Indication**" means (a) [*], and (b) any other Indication [*] that is designated by the JDC as a [*] Indication pursuant to Section [*].

1.67 "**Other Skeletal Sarcomere Activators**" means [*] Activators and [*] Activators, and specifically excludes (a) Fast Skeletal Regulatory Activators, (b) [*], and (c) any compound targeting any [*].

1.68 "**Patent Rights**" means all patents and patent applications (which shall be deemed to include certificates of invention and applications for certificates of invention), including all divisionals, continuations, substitutions, continuations-in-part, re-examinations, reissues, additions, renewals, revalidations, extensions, registrations, pediatric exclusivity periods and supplemental protection certificates and the like of any such patents and patent applications, and any and all foreign equivalents of the foregoing.

1.69 "**Person**" means any individual, partnership, limited liability company, firm, corporation, association, trust, unincorporated organization or other entity.

1.70 "**Phase 1 Clinical Trial**" means a controlled human clinical trial of a Collaboration Product that would satisfy the requirements of 21 CFR 312.21(a) or corresponding foreign regulations, regardless of whether such trial is referred to as a "phase 1 clinical trial" in the Development Plan.

1.71 "**Phase 2 Clinical Trial**" means a controlled human clinical trial of a Collaboration Product that would satisfy the requirements of 21 CFR 312.21(b) or corresponding foreign regulations, regardless of whether such trial is referred to as a "phase 2 clinical trial" in the Development Plan.

1.72 "**Phase 3 Clinical Trial**" means a controlled or uncontrolled human clinical trial of a Collaboration Product that would satisfy the requirements of 21 CFR 312.21(c) or corresponding foreign regulations, regardless of whether such trial is referred to as a "phase 3 clinical trial" in the Development Plan.

1.73 "[*] means any [*] that is intended [*] may be necessary to [*] in the Development Plan.

1.74 "**Regulatory Approval"** means the approval by the appropriate Regulatory Authority to commercially sell a pharmaceutical product (but excluding pricing or reimbursement approvals) in the Field in a particular jurisdiction.

1.75 "**Regulatory Authority"** means any applicable Governmental Authority responsible for granting Marketing Approvals or pricing approvals for Collaboration Products, including the FDA, the EMA and any corresponding national or regional regulatory authorities.

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1.76 "**Regulatory Exclusivity**" means any exclusive marketing rights or data exclusivity rights conferred by any Regulatory Authority with respect to a pharmaceutical product other than patents, including, without limitation, orphan drug exclusivity, new chemical entity exclusivity, data exclusivity, pediatric exclusivity, rights conferred in the United States under the Hatch-Waxman Act or the FDA Modernization Act of 1997, or rights similar thereto outside the United States.

1.77 "**Regulatory Materials**" means any regulatory application, submission, notification, communication, correspondence, registration and other filings made to, received from or otherwise conducted with a Regulatory Authority in order to Research a Compound and/or Develop, Manufacture, or Commercialize a Compound or Collaboration Product in the Field in a particular country or jurisdiction. "Regulatory Materials" includes any IND, MAA and Marketing Approval.

1.78 "**Registration Dossier**" means the registration dossier designed to support Marketing Approval by the FDA and Marketing Approval in the EU (excluding any country-specific approvals for pricing or reimbursement).

1.79 "**Research**" means all research activities conducted by or on behalf of either Party or the Parties jointly pursuant [*].

1.80 "**Retained Indication**" means any Indication in the Field that is not a Licensed Indication, [*] Indication, [*] Indication, or [*] Indication.

1.81 "[*] **Compounds**" means (a) Tirasemtiv, (b) any compositions of matter (i) falling within the scope of any of the generic formulas disclosed in the Patent Rights listed in **Exhibit E** (the "[*] **Patent Rights**") and/or (ii) specifically disclosed in the [*] Patent Rights; and (c) any [*] in subclause (a) or (b) above.

1.82 "**Shared Territory**" means (a) the Co-Promotion Territory and (b) the European Union and Switzerland.

1.83 "[*] **Activator**" means (a) any small molecule compound that (i) is [*], (ii) has a specified level of stimulatory activity against any [*], as set forth in the applicable Compound Criteria, and (iii) the [*] and (b) any [*] in subclause (a) above.

1.84 "**SMA**" means spinal muscular atrophy.

1.85 "**Third Party**" means any Person other than a Party or an Affiliate of a Party.

1.86 "**Tirasemtiv**" means Cytokinetics' proprietary compound formerly known as CK-2017357.

1.87 "**United States**" or "**U.S.**" means the United States of America, including its fifty (50) states and the District of Columbia.

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1.88 "**Valid Claim**" means a claim of an issued and unexpired patent (as may be extended through supplementary protection certificate or patent term extension) or a pending patent application included within [*], which claim has not been revoked, held invalid or unenforceable by a patent office, court or other governmental agency of competent jurisdiction in a final and non-appealable judgment (or judgment from which no appeal was taken within the allowable time period) and has not been disclaimed, denied or admitted to be invalid or unenforceable through reissue, re-examination or disclaimer or otherwise.

1.89 **Additional Definitions**. The following table identifies the location of definitions set forth in various Sections of the Agreement:

Definition	**Section**
Alliance Manager	2.1
[*] Advance Invoice	11.3(c)(i)
[*] Indication Development Budget	6.2(a)
[*]	[*]
[*] True-Up Report	11.3(c)(ii)
[*] Indication Development Work	6.3(b)(iv)
[*] Date	9.6(b)
Astellas [*]	[*]
Astellas Co-Promotion Notice	9.6(b)(i)
Astellas Indemnitees	16.1
Astellas [*]	[*]
Astellas [*]	[*]
Astellas [*]	[*]
Bankruptcy Code	3.8
Combination Product	1.65(e)
Commercial Operating Team	9.7
Commercialization Plan	9.3(a)
[*]	[*]
Co-Promotion Agreement	9.6(g)
[*]	[*]
Co-Promotion Matters	9.6(b)(i)
Cytokinetics Co-Funding Option	4.1(b)
Cytokinetics Co-Promotion Effort	9.6(c)
Cytokinetics Co-Promotion Recommendation	9.6(b)(ii)
Cytokinetics [*]	[*]
Cytokinetics Indemnitees	16.2
Cytokinetics [*]	[*]
Cytokinetics [*]	[*]
Cytokinetics Product Marks	12.5(b)

Cytokinetics Research FTEs	5.3
Cytokinetics [*]	[*]

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Cytokinetics [*]	[*]
Development Advance Invoice	11.3(a)(i)
Development Plan	6.2(a)
Development Program	6.2(a)
Development Project Team	6.10
Development True-Up Report	11.3(a)(ii)
Disclosing Party	13.1(a)
[*]	[*]
Earlier Milestone Events	11.5(b)
Early Stage Work	6.3(b)(ii)
Established Commercial Infrastructure	9.9
[*]	[*]
[*]	[*]
FCPA	17.7(a)
FCPA Covered Person	17.7(a)
Federal Arbitration Act	17.6(a)
[*]	[*]
Indemnified Party	16.3
Indemnifying Party	16.3
[*] Rules	17.6(a)
JCC Determination	9.6(b)(iii)
Joint Commercialization Committee or JCC	2.6
Joint Development Committee or JDC	2.4
Joint Manufacturing Committee or JMC	2.5
Joint Medical Affairs Committee or JMAC	2.7
Joint Patent Committee or JPC	2.8
Joint Research Committee or JRC	2.3
Joint Steering Committee or JSC	2.2
[*] Regulatory Materials	7.2(a)
Later Milestone Events	11.5(b)
Medical Affairs Plan	10.3
MSLs	10.1
[*]	[*]
Neuromuscular Indications	9.6(a)
[*]	[*]
[*] Indication Development Costs	6.4(b)

Pharmacovigilance Agreement	7.5
Phase 1 Work	6.3(b)(i)
[*]	[*]
[*]	[*]
[*]	[*]
[*]	[*]

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Product Infringement	12.4(a)
Product Marks	12.5(a)
Receiving Party	13.1(a)
Remainder	12.4(f)
Remedial Action	7.7
Research Advance Invoice	11.2(a)
Research Budget	5.3
Research Plan	5.3
Research Plan Costs	5.6
Research Program	5.1
Research Project Team	5.8
Research Term	5.2
Research True-Up Report	11.2(b)
Responsible Committee	13.4
[*]	[*]
[*]	[*]
Royalty Term	11.7(b)
[*]	[*]
SEC	13.5(b)
[*] Patent Rights	1.81
Term	14.1

1.90 Interpretation. In this Agreement, unless otherwise expressly specified:

(a) The words “include”, “includes” and “including” shall be deemed to be followed by the phrase “without limitation”.

(b) words denoting the singular shall include the plural and vice versa and words denoting any gender shall include all genders;

(c) the word “or” is used in the inclusive sense typically associated with the phrase “and/or;”

(d) 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;

(e) “days” means calendar days; and

(f) the Exhibits and other attachments form part of the operative provision of this Agreement and references to “this Agreement” shall include references to the Exhibits and attachments.

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ARTICLE 2
GOVERNANCE

2.1 Alliance Managers. Each Party hereby appoints the person listed on **Exhibit F** to act as its alliance manager under this Agreement as of the Effective Date (the "**Alliance Manager**"). The Alliance Managers shall: (a) serve as the primary contact points between the Parties for the purpose of providing the other Party with information on the progress of such Party's activities under this Agreement; (b) be primarily responsible for facilitating the flow of information and otherwise promoting communication, coordination and collaboration between the Parties; (c) act as advocates for the Collaboration as a whole; (d) have regular telephone calls; (e) use Diligent Efforts to facilitate the prompt resolution of any disputes; (f) attend as appropriate JRC, JDC, JMC, JCC and JMAC meetings; and (g) have the right to attend all other Committee and subcommittee meetings, all as non-voting members. An Alliance Manager may also bring any matter to the attention of any Committee if such Alliance Manager reasonably believes that such matter warrants such attention. Each Party may replace its Alliance Manager at any time upon written notice to the other Party.

2.2 Joint Steering Committee. The Parties shall establish a joint steering committee (the "**Joint Steering Committee**" or the "**JSC**"), composed of [*] of each Party, including the [*] under this Agreement and [*] under this Agreement. All JSC representatives will have sufficient authority within the applicable Party to make decisions [*] arising within the scope of the JSC's responsibilities. Either Party may request that its own or the other Party's personnel with expertise on a particular matter attend a JSC meeting where such matter will be discussed. The JSC shall in particular:

(a) oversee and provide strategic direction to the Collaboration;

(b) oversee the integration and coordination of the Research, Development, Manufacture (as applicable), Commercialization and Medical Affairs Activities of the Compounds and Collaboration Products within the JSC member's company;

(c) provide a forum for discussion of the Research, Development, Manufacture, Commercialization and Medical Affairs Activities of the Compounds and Collaboration Products;

(d) review the Parties' progress against the Research Plan, Development Plan, Commercialization Plan and Medical Affairs Plan;

(e) oversee the operation of the JRC, JDC, JMC, JCC, JMAC and JPC, including resolving any disputed matter of the JRC, JDC, JMC, JCC, JMAC and JPC; and

(f) perform such other duties as are expressly assigned to the JSC in this Agreement, and such other functions as appropriate to further the purposes of this Agreement as may be allocated to it by the Parties' written agreement.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

2.3 Joint Research Committee. The Parties shall establish a joint research committee (the "**Joint Research Committee**" or the "**JRC**"), composed of [*] of each Party that have [*] in the research of compounds similar to the Compounds, to monitor and coordinate the Research of Compounds under the Collaboration. The JRC shall exist during the Research Term. All JRC representatives will have sufficient authority within the applicable Party to make decisions [*] arising within the scope of the JRC's responsibilities. The JRC shall in particular:

(a) coordinate the activities of the Parties under the Research Plan and oversee the implementation of the Research Plan;

(b) prepare and approve annual or interim amendments to the Research Plan (including the Research Budget);

(c) provide a forum for and facilitate communications between the Parties with respect to the Research of Compounds;

(d) establish joint subcommittees, as appropriate, to carry out its functions; and

(e) perform such other functions as may be appropriate to further the purposes of this Agreement with respect to the Research of Compounds.

2.4 Joint Development Committee. The Parties shall establish a joint development committee (the "**Joint Development Committee**" or the "**JDC**"), composed of up to [*] of each Party that have [*] in the development of products similar to the Compounds and Collaboration Products, to monitor and coordinate the Development of the Compounds and Collaboration Products under the Collaboration. All JDC representatives will have sufficient authority within the applicable Party to make decisions [*] arising with the scope of the JDC's responsibilities. The JDC shall in particular:

(a) coordinate the activities of the Parties under the Development Plan and oversee the implementation of the Development Plan;

(b) establish the protocol and statistical analysis plan for each human clinical trial conducted under the Development Plan;

(c) prepare and approve annual or interim amendments to the Development Plan (including the Cytokinetics Development Budget);

(d) provide a forum for and facilitate communications between the Parties with respect to the Development of the Compounds and Collaboration Products;

(e) review the data and results of [*] a Collaboration Product [*] such Collaboration Product [*] in which case [*];

(f) monitor and coordinate all regulatory actions, communications and submissions for the Compounds and Collaboration Products under the Development Plan, including allocating related medical affairs responsibilities between the Parties;

(g) until formation of the JMAC, oversee medical education activities and establish a joint review process for medical affairs materials, including disease state awareness, medical education and other non-promotional materials;

(h) establish joint subcommittees, as appropriate, to carry out its functions; and

(i) perform such other functions as may be appropriate to further the purposes of this Agreement with respect to the Development of the Compounds and Collaboration Products.

2.5 Joint Manufacturing Committee. The Parties shall establish a joint manufacturing committee (the "**Joint Manufacturing Committee**" or "**JMC**"), composed of up to [*] of each Party that have [*] in the manufacture of compounds and products similar to the Compounds and Collaboration Products, to monitor and oversee the CMC Activities and other activities related to the Manufacture of the Compounds and Collaboration Products for use under the Collaboration. All JMC representatives will have sufficient authority within the applicable Party to make decisions [*] arising within the scope of the JMC's responsibilities. The JMC shall in particular:

(a) discuss, approve and oversee implementation of and progress against the Development Plan and Commercialization Plan as they relate to CMC Activities;

(b) coordinate and facilitate cooperation and flow of information between the Parties with respect to the Manufacture and supply of the Compounds and Collaboration Products for Development and Commercialization use in accordance with Article 8;

(c) coordinate and facilitate the transfer of Manufacturing Know-How as and to the extent provided in Article 8;

(d) establish joint subcommittees, as appropriate, to carry out its functions; and

(e) perform such other functions as may be appropriate to further the purposes of this Agreement with respect to the Manufacture of Compounds and Collaboration Products, as directed by the JDC or JCC (as applicable).

2.6 Joint Commercialization Committee. Unless otherwise agreed upon between the Parties, within [*], the Parties shall form and establish a joint commercialization committee (the "**Joint Commercialization Committee**" or "**JCC**"), composed of [*] of each Party that have [*] in the commercialization of products similar to the Collaboration Products, to monitor

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and oversee the Commercialization activities of the Collaboration Products under the Collaboration. All JCC representatives will have sufficient authority within the applicable Party to make decisions [*] arising within the scope of the JCC's responsibilities. The JCC shall in particular:

(a) coordinate the activities of the Parties under the Commercialization Plan and oversee the implementation of the Commercialization Plan;

(b) prepare and approve annual or interim amendments to the Commercialization Plan;

(c) provide a forum for and facilitate communications between the Parties with respect to the Commercialization of the Collaboration Products;

(d) establish joint subcommittees, as appropriate, to carry out its functions; and

(e) perform such other functions as may be appropriate to further the purposes of this Agreement with respect to the Commercialization of the Collaboration Products.

2.7 Joint Medical Affairs Committee. Unless otherwise agreed upon between the Parties, [*] the Parties may agree upon, the Parties shall form and establish a joint medical affairs committee (the "**Joint Medical Affairs Committee**" or "**JMAC**"), composed of [*] of each Party that have [*] in Medical Affairs Activities of products similar to the Collaboration Products, to monitor and oversee the Medical Affairs Activities for the Compounds and Collaboration Products under the Collaboration. All JMAC representatives will have sufficient authority within the applicable Party to make decisions [*] arising within the scope of the JMAC's responsibilities. The JMAC shall in particular:

(a) coordinate the activities of the Parties under the Medical Affairs Plan and oversee the implementation of the Medical Affairs Plan;

(b) prepare and approve annual or interim amendments to the Medical Affairs Plan;

(c) prepare and approve the protocol and statistical analysis plan for each human clinical trial to be conducted under the Medical Affairs Plan;

(d) provide a forum for and facilitate communications between the Parties with respect to the Medical Affairs Activities for the Compounds and Collaboration Products;

(e) establish a joint review process for medical affairs materials, including disease state awareness, medical education and other non-promotional materials;

(f) establish joint subcommittees, as appropriate, to carry out its functions; and

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(g) perform such other functions as may be appropriate to further the purposes of this Agreement with respect to the Medical Affairs Activities for the Compounds and Collaboration Products.

2.8 Joint Patent Committee. The Parties shall establish a joint patent committee (the "**Joint Patent Committee**" or "**JPC**"), composed of [*] representing each Party, to coordinate the prosecution and enforcement of Collaboration Patents under Article 12. Such patent counsel shall have sufficient authority within or on behalf of the applicable Party to make decisions [*] arising within the scope of the JPC's responsibilities. The JPC shall in particular:

(a) coordinate and facilitate the prosecution and enforcement of the Collaboration Patents, and make periodic reports of the same to the JSC and other Committees upon request;

(b) discuss and develop patent strategy for Collaboration Patents, including making key decisions on drafting, filing, prosecution, maintenance, enforcement and defense of Collaboration Patents, as well as providing a forum for the Parties to discuss material issues and provide input to each other regarding Collaboration Patents;

(c) determine which Patents are to be considered Collaboration Patents, and oversee the determination of inventorship of Collaboration Intellectual Property;

(d) confer regarding patent term extensions and listings in the FDA's Approved Drug Products with Therapeutic Equivalence Evaluations (known as the "Orange Book") and its foreign counterparts; and

(e) perform such other functions as may be appropriate to further the purposes of this Agreement with respect to the patent prosecution and enforcement activities under this Agreement.

2.9 [*]. In the event that [*] a Compound and corresponding Collaboration Product [*] under Section [*] such Compound and Collaboration Product [*], the Parties shall [*] and discuss and decide [*] such Compound and Collaboration Product [*]. [*]; provided that, with respect to [*]. [*] contemporaneously with or following the [*] as agreed by the Parties. [*] such Compound and Collaboration Products [*] taking into consideration [*] as well as the [*]. [*] the roles and responsibilities of each Party [*] such Compound and Collaboration Product. For clarity, [*] pursuant to Section [*].

2.10 Limitation of Committee Authority. Each Committee shall only have the powers expressly assigned to it in this Article 2 and elsewhere in this Agreement and shall not have the authority to: (a) modify or amend the terms and conditions of this Agreement; (b) waive either Party's compliance with the terms and conditions of under this Agreement; or (c) determine any such issue in a manner that would conflict with the express terms and conditions of this Agreement.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

2.11 Committee Membership and Meetings.

(a) Committee Members. The members of each Party on the JSC, JRC, JDC and JPC as of the Effective Date are set forth in **Exhibit F**. Each Party may replace its representatives on any Committee by written notice to the other Party. Each Party shall appoint one (1) of its representatives on each Committee to act as a co-chairperson of such Committee. The co-chairpersons shall jointly prepare and circulate agendas and reasonably detailed minutes for each Committee meeting within thirty (30) days of such meeting.

(b) Meetings. Unless the Parties otherwise agree, each Committee shall hold meetings at such times as it elects to do so, but (i) no less frequently than once every [*] for the JRC, (ii) [*] the JDC and the JMC; and (iii) [*] the JCC. In all other circumstances, each Committee shall hold regular meetings no less frequently than once every [*] and more frequently as needed upon written request of either Party and consent of the other Party, which consent shall not be unreasonably withheld or delayed. Meetings of each Committee shall be held via teleconference, via videoconference or in person, provided that at least [*] per year for the [*] and, [*] per year for the [*] shall be held in person (unless the Parties otherwise agree) at locations to be alternately selected by each Party. Each Party shall be responsible for all of its own expenses of participating in any Committee. No action taken at any meeting of a Committee shall be effective unless a representative of each Party is participating.

(c) Non-Member Attendance. Each Party may from time to time invite a reasonable number of participants, in addition to its representatives, to attend the Committee meetings in a non-voting capacity; provided that if either Party intends to have any Third Party (including any consultant) attend such a meeting, such Party shall provide prior written notice to the other Party and shall ensure that such Third Party is bound by confidentiality and non-use obligations consistent with the terms of this Agreement.

2.12 Continuity of Representation. Notwithstanding the Parties' respective right to replace its Alliance Manager and members of Committees by written notification to the other Party, each Party shall strive to maintain continuity in the representation of such Alliance Manager and Committee members. If a particular Committee ceases to exist but certain activities that have been overseen by such Committee are still ongoing, then the Parties shall by mutual written agreement allocate the responsibility for overseeing such activities to another then-operating Committee that is competent and suitable in authority and expertise.

2.13 Decision-Making. All decisions of each Committee shall be made by [*]. If after reasonable discussion and good faith consideration of each Party's view on a particular matter before a Committee, the representatives of the Parties cannot reach an agreement as to such matter within [*] after such matter was brought to such Committee for resolution or after such matter has been referred to such Committee, such disagreement shall be referred to the JSC (in the case of disagreement of the JRC, JDC, JMC, JCC, JMAC, JPC or other joint subcommittees) for resolution. If the JSC cannot resolve such matter within [*] after such matter has been referred to them, then:

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

(a) [*]. [*] for those set forth in Section [*].

(b) [*]. [*]:

(i) pertaining to [*] as to whether to [*];

(ii) the [*]; and/or

(iii) pertaining to the following aspects of activities relating to [*]:

(1) [*] Activators in any such Indication (including the related [*]) to generate the [*] as part of the Collaboration and the related [*] for so long as [*] such Development, including the generation of the [*] as set forth in Section [*] for which [*] is responsible under Section 6.3 [*] related matters, but [*], as well as the [*]. For clarity, after [*] without the [*];

(2) the [*] Activators in any such [*], as set forth in more detail in Section [*]. For clarity, [*] shall not cover the [*], which shall be [*] subject to the [*] if the matter is [*] during the [*];

(3) the [*] Activators in any such [*] during the [*];

(4) if [*] for such [*] for such [*]; and

(5) if [*] for such [*] for such [*] consistent with Article [*] set forth in this Section 2.13(b).

(c) [*]. The following issues in Sections 2.13(c)(i) through (vi) below (the "[*]") shall be subject to[*]:

(i) the [*] Indication as [*] Indication and the related [*] the Development Plan pertaining to the Development of one or more [*] Activator(s) in such Indication as set forth in Section [*]. For clarity, if the Parties [*] Indication as [*] Indication, or on the [*] Development Plan pertaining to such Indication, then such [*] Indication shall [*] Indication;

(ii) the [*] Activator in any [*] Indication, including [*] to support (A) [*] such Compound and corresponding Collaboration Product [*]; and (B) [*] such Compound and corresponding Collaboration Product [*] with respect to such [*] Activator and [*] with respect thereto;

(iii) the [*];

(iv) [*] (but the related [*] subject to the [*] (as applicable) subject to the [*] if the matter is [*] described in Sections [*] as subject to [*];

(v) the [*] set forth in the Development Plan [*], except for any [*]); and

(vi) any other decision [*] under this Agreement.

[*]

(d) [*].

(i) With respect to [*] the Development activities (which include [*] in connection with such Development activities to the extent provided in Article [*]) pursuant to Section [*] with respect to [*] as well as the related [*] (which shall be subject to [*]), unless such activities [*] under the Collaboration, in which case the status quo will remain in effect until the issue is resolved. For clarity, [*], such matters shall be [*].

(ii) [*] with respect to [*] Indications [*] as set forth in Section [*].

(iii) [*] Indication, the Party [*] shall have the [*] with respect to [*] as set forth in Section [*].

(iv) The Party [*] Collaboration Product [*] will have the [*] with respect to [*].

2.14 Discontinuation of Participation on a Committee. The activities to be performed by each Committee shall solely relate to governance under this Agreement, and are not intended to be or involve the delivery of services. Each Committee shall continue to exist until the first to occur of: (a) the Parties mutually agreeing to disband the Committee; or (b) Cytokinetics providing written notice to Astellas of its intention to disband and no longer participate in such Committee. Once the Parties mutually agree or Cytokinetics has provided written notice to disband such Committee, such Committee shall have no further obligations under this Agreement and, thereafter, the Alliance Managers shall be the contact persons for the exchange of information under this Agreement and decisions of such Committee shall be decisions as between the Parties, subject to the other terms and conditions of this Agreement.

2.15 Budgets and Fiscal Years. The Parties acknowledge that Astellas' fiscal year runs from April 1 through March 31, while Cytokinetics' fiscal year runs from January 1 through December 31. Accordingly, [*] relating to the Research, Development, Medical Affairs and Commercialization of the Compounds and Collaboration Products [*].

ARTICLE 3
LICENSES

3.1 License to Astellas. Subject to the terms and conditions of this Agreement, Cytokinetics hereby grants to Astellas the following royalty-bearing worldwide licenses [*] under the Cytokinetics Technology and Cytokinetics' interest in the Collaboration Intellectual Property:

(a) to Research Other Skeletal Sarcomere Activators in the Field, in each case pursuant to the Research Plan during the Research Term, which license shall be [*] as set forth in Section [*];

(b) to Develop Other Skeletal Sarcomere Activators in the Collaboration Indications, in each case pursuant to the Development Plan, which license shall be [*] as set forth in Section [*];

(c) to use Other Skeletal Sarcomere Activators and Collaboration Products containing Other Skeletal Sarcomere Activators in the Field and to make, have made, offer for sale, sell and otherwise Commercialize Other Skeletal Sarcomere Activators and Collaboration Products containing Other Skeletal Sarcomere Activators for use in the Field, which license shall be [*], except as provided in Sections [*] below; and

(d) to perform Medical Affairs Activities for the Compounds and Collaboration Products pursuant to the Medical Affairs Plan, [*], except as provided in Sections [*] below.

Subject to Section [*], the licenses granted by Cytokinetics to Astellas under this Agreement [*] to develop, make, have made, use, sell, offer for sale or otherwise commercialize [*] that is [*] with a Compound.

3.2 Sublicense Rights. Subject to the terms and conditions of this Agreement:

(a) Further subject to Section [*] below, each Party may exercise its rights and perform its obligations under this Agreement by itself or through the engagement of any of its Affiliates [*] in the performance of this Agreement.

(b) Each Party may sublicense the rights granted to it under Section [*] (as applicable) to one (1) or more Third Parties, provided, however, that such Party shall: (i) [*], and (ii) [*] the other Party [*].

(c) Notwithstanding the foregoing, [*] with respect to Collaboration Products [*] but in any event [*].

(d) Each Party shall remain directly responsible for all of its obligations under this Agreement that have been delegated, subcontracted or sublicensed to any of its Affiliates, sublicensees or subcontractors and shall ensure that such Affiliates, sublicensees and subcontractors comply with the terms and conditions of this Agreement.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

3.3 Cytokinetics' Retained Rights. Cytokinetics and its Affiliates hereby retain:

(a) the rights to practice the Cytokinetics Technology and Cytokinetics' interest in the Collaboration Intellectual Property to exercise its and their rights and perform its and their obligations under this Agreement, whether directly or through one or more licensees; and

(b) subject to Section [*], the exclusive rights to otherwise practice and license the Cytokinetics Technology and Cytokinetics' interest in the Collaboration Intellectual Property outside the scope of the licenses granted to Astellas under Section [*].

3.4 License to Cytokinetics. Subject to the terms and conditions of this Agreement, Astellas hereby grants to Cytokinetics the following fully paid-up licenses [*]:

(a) under the Astellas Technology and Astellas' interest in the Collaboration Intellectual Property to Research Other Skeletal Sarcomere Activators in the Field, in each case pursuant to the Research Plan during the Research Term, [*];

(b) under the Astellas Technology and Astellas' interest in the Collaboration Intellectual Property to Develop the Compounds and Collaboration Products pursuant to the Development Plan, [*];

(c) under the Astellas Technology and Astellas' interest in the Collaboration Intellectual Property to manufacture and have manufactured the Compounds and Collaboration Products pursuant to the Development Plan or Commercialization Plan as appropriate, [*];

(d) under the Astellas Technology and Astellas' interest in the Collaboration Intellectual Property to Co-Promote the Collaboration Products in the Co-Promotion Territory (or Shared Territory, as applicable and as set forth in Section 9.6) pursuant to the Commercialization Plan upon Cytokinetics' exercise of the Co-Promotion option under Section 9.6, [*];

(e) under the Astellas Technology and Astellas' interest in the Collaboration Intellectual Property to Commercialize in the Shared Territory the Collaboration Products in any [*] Indication(s) [*];

(f) further subject to Section [*], under Astellas' interest in the Collaboration Intellectual Property to research, develop, manufacture, have manufactured and commercialize [*] for uses in all Indications worldwide, [*]; and

(g) under the Astellas Technology and Astellas' interest in the Collaboration Intellectual Property to perform Medical Affairs Activities for the Compounds and Collaboration Products in the Co-Promotion Territory (or Shared Territory, as applicable and as set forth in Article 10) pursuant to the Medical Affairs Plan, [*].

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

3.5 No Implied Licenses; Negative Covenant. Except as set forth herein, neither Party shall acquire any license or other intellectual property interest, by implication or otherwise, under or to any trademarks, Patent Rights, Know-How, or other intellectual properties owned or Controlled by the other Party. For clarity, the license granted to each Party under any particular Patent Rights or Know-How Controlled by the other Party shall confer exclusivity to the Party obtaining such license only to the extent the Party granting such license Controls the exclusive rights to such Patent Rights or Know-How. Neither Party shall, nor shall permit any of its Affiliates or sublicensees to, practice any Patent Rights or Know-How licensed to it by the other Party outside the scope of the license granted to it under this Agreement.

3.6 [*]**.**

(a) Except as set forth in Section [*] and subject to Sections [*] below, [*] Activators [*] for use in the [*] pursuant to this Agreement or the Collaboration.

(b) If either Party [*] and if such [*], as of the [*] such Party would [*] set forth in Section [*], then such Party shall [*] either (i) [*] of this Agreement, in which event [*] a Compound and/or Collaboration Product under this Agreement and subject to the terms and conditions hereunder and any [*] the Research, Development, Manufacture or Commercialization of [*], or (ii) [*]. Such Party's [*] shall not be deemed [*] set forth in this Section 3.6; provided that such Party [*] under this Agreement and [*] the other Party [*] as used in this Section 3.6(b), means [*] by such Party [*].

(c) If [*] pursuant to Section [*] apply with respect to [*].

3.7 Subcontractors. Each Party shall have the right to engage subcontractors for purposes of conducting activities assigned to it under this Agreement and grant a limited sublicense to such Third Parties solely for the purpose of performing such activities, provided that any such subcontractor is bound by written obligations of confidentiality and non-use consistent with this Agreement [*] and has agreed to [*] that relate to any Compounds or Collaboration Products or their use, manufacture or sale, which [*] as appropriate. Each Party shall remain directly responsible for any obligations under this Agreement that have been delegated or subcontracted to any subcontractor, and shall be directly responsible for the performance of its subcontractors.

3.8 365(n) Rights. All rights and licenses granted under or pursuant to any section of this Agreement, including the licenses granted under this Article 3 and Section 14.3, are and will otherwise be deemed to be for purposes of Section 365(n) of the United States Bankruptcy Code (Title 11, U.S. Code), as amended (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. Each Party agrees that the other 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." Each Party further agrees that, in the event of the commencement of a

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bankruptcy proceeding by or against such Party under the Bankruptcy Code or analogous provisions of applicable Law outside the United States, to the extent permitted by Law, [*] the Research and/or Development of the Compounds and/or Collaboration Products under this Agreement pursuant to the Research Plan and/or Development Plan, as appropriate, which, [*]. Additionally, upon request by the other Party, the bankruptcy Party shall [*].

ARTICLE 4
ADDITION OF NEUROMUSCULAR INDICATIONS TO DEVELOPMENT PLAN

4.1 [*] **Indications.**

(a) **Addition of** [*] **Indications.** The Parties may add one or more Retained Indication(s) to the Development Plan as [*] Indication(s) by mutual agreement. If a Party is interested in adding any such Retained Indication as [*] Indication, such Party shall notify the other Party and provide the other Party with [*] the Development Plan [*] for such Retained Indication, and the Parties shall confer and discuss such proposed addition. Such Retained Indication shall be added as [*] Indication [*] the Development Plan pertaining to the Development of [*] Activators in such Retained Indication. If such Retained Indication is added to the [*] Indications, such Indication shall cease to be a Retained Indication and the Parties shall [*] agreed by the Parties).

(b) **Cytokinetics Co-Funding Option.** On [*] Activator-by-[*] Activator basis, Cytokinetics shall have [*] option to co-fund [*] (the "**Cytokinetics Co-Funding Option**"). Cytokinetics may exercise the Cytokinetics Co-Funding Option for a particular [*] Activator by providing a written notice of option exercise to Astellas at any time [*]Indication for such [*] Activator. Astellas shall provide Cytokinetics with [*].

(c) [*]. If: (i) [*] for a particular [*] Activator, or (ii) [*] for such [*] [*] with written notification [*] then in each case [*].

(d) **"**[*]" means, with respect to a particular [*] Activator, the [*], including, but not limited to, [*] regardless of the [*] pursuant to Section [*] in accordance with the Development Plan and [*] Indication(s) (including any [*], but excluding any [*] to generate the [*] for a particular [*] Activator in [*] Indications. For clarity, [*] shall include the [*] for such [*] Activator with the [*], regardless of [*], but shall exclude the [*] in the Shared Territory, or [*] for such [*] Activator in a [*] in the Astellas Territory. [*] shall include the [*] of the Compound and Collaboration Product [*] but shall exclude the [*] necessary for the [*].

4.2 [*] **Indications.**

(a) **Addition of** [*] **Indications.** [*] one or more [*] Indications to the Development Plan as [*] Indication(s) upon written notice to [*] Development activities for such Collaboration Product for such Indication, whereupon such Indication shall cease to be [*] Indication. In connection with [*] shall provide [*] the Development Plan (including the [*])

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

pertaining to the Development of [*] Activators in such Indication(s) and [*] the JDC. If the JDC [*] and if the [*] will have the [*].

(b) [*]**.** [*] shall have the right to [*] the [*] Indication [*] for such Indication ("[*]"). If [*] shall also be [*] Development activities for such Indication pursuant to Section [*] shall continue to [*], to the extent practicable [*] Development program, and [*] under the Development Plan) [*] Development work [*] including, but not limited to, the [*] pertaining to such Indication subject to [*] set forth in Article [*]. [*] with respect to any [*] Indication [*] at any of the [*]: (i) [*] (for any [*] Indication) [*] such Indication to the Collaboration under Section [*]; (ii) if applicable, [*] with respect to the [*] Development Plan pertaining to the Development of the [*] Activator in such Indication under Section [*] Development activities with respect to such Compound in such Indication; and/or (iii) if applicable, [*] with respect to the Development Plan and [*] Indication [*] the Development of [*] in such Indication under Section [*] for such Indication. [*] related Development work [*] the Development Plan [*]. To clarify, Section [*] of the [*] shall not apply for [*].

(c) **"**[*]" means with respect to a particular [*] Activator in [*] Indication, the [*], as well as any [*], but excluding any [*] shall include the [*] for [*] Activator with the [*], regardless of [*] but shall exclude the [*] in the Shared Territory, or [*] for [*] Activator in a[*] in the Astellas Territory, which [*] shall be [*]. [*] Indication [*] shall include the [*] but shall exclude the [*].

ARTICLE 5
RESEARCH

5.1 **General.** The Parties will continue to conduct their research collaboration to discover, identify, characterize and optimize Other Skeletal Sarcomere Activators in the Field pursuant to the Research Plan (the "**Research Program**").

5.2 **Research Term.** The term of such Research Program (the "**Research Term**") shall commence on the January 1, 2020 as an extension to the research program under the Existing Agreement and end on December 31, 2020. The Research Term may be extended by the Parties' mutual written agreement.

5.3 **Research Plan.** All Research activities under this Agreement shall be conducted pursuant to a comprehensive written Research plan for Astellas' fiscal year during the Research Term (the "**Research Plan**"). The Research Plan shall allocate Research responsibilities between the Parties and shall set forth the objectives, activities and criteria for evaluation for such Research, as well as the timeline related thereto. The Research Plan shall also set forth the detailed budget for such Research activities, including a minimum of fifteen (15) Cytokinetics FTEs that Astellas shall support annually through December 31, 2020 (the "**Cytokinetics Research FTEs**"), the number of Astellas FTEs committed by Astellas during the Research Term and outsourced costs (the "**Research Budget**"). From time to time during the

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Research Term, the JRC shall prepare updates and amendments, as appropriate, to the then-current Research Plan (including the Research Budget). In any event, the Research Plan for the forthcoming Astellas' fiscal year shall be approved by [*] of the preceding year, provided that by [*] of each calendar year, the JRC shall agree upon a proposed budget for the following Astellas fiscal year with respect to costs other than for the Cytokinetics Research FTEs, and Astellas shall use good faith efforts to obtain internal approval for such proposed budget to become effective by [*]. The JRC shall have the right to approve updates and amendments to the Research Plan (including the Research Budget), provided that no amendment to the Research Plan (including the Research Budget) shall decrease the number of Cytokinetics Research FTEs supported by Astellas without Cytokinetics' consent. Once approved by the JRC, such revised Research Plan shall replace the prior Research Plan. If the terms of the Research Plan contradict, or create inconsistencies or ambiguities with, the terms of this Agreement, then the terms of this Agreement shall govern.

5.4 Conduct of Research. Each Party shall use Diligent Efforts to carry out the Research activities assigned to it in the Research Plan and shall conduct such activities in good scientific manner, and in compliance with all applicable Laws. Each Party shall keep the other Party reasonably informed as to its progress in the conduct of the Research Plan through meetings of the JRC. At least [*] Business Days before each JRC meeting, each Party shall submit to the JRC a written summary of its Research activities since its prior report. All [*] under the Research Plan will be [*], provided that neither Party will be required to [*] where it reasonably believes that [*].

5.5 Research Records. Each Party shall maintain complete, current and accurate records of all Research activities conducted by it hereunder, and all data and other information resulting from such activities. Such records shall fully and properly reflect all work done and results achieved in the performance of the Research activities in good scientific manner [*] to the extent [*]. After the Effective Date, upon reasonable request of [*] to be mutually agreed by the Parties, [*] that pertain to the Compounds and/or Collaboration Products or otherwise relate to the Research performed pursuant to the Research Plan [*] as described in the [*] [*] shall be deemed Confidential Information [*].

5.6 Research Plan Costs. Subject to this Section 5.6, Astellas shall be responsible for all the costs and expenses incurred by both Parties in performing the Research in accordance with the Research Plan (the "**Research Plan Costs**") and shall reimburse Cytokinetics for the Research Plan Costs incurred by or on account of Cytokinetics in accordance with the Research Budget pursuant to Section 11.2. Research Plan Costs that are incurred by Cytokinetics and subject to reimbursement by Astellas shall include the costs of [*] set forth in the Research Plan, and [*]. During any given Astellas fiscal year, Astellas shall not be responsible for reimbursement of (i) any [*]; or (ii) any [*] the applicable Research Budget.

5.7 Other [*]**.** Each Party shall have the right to [*] the Research Plan solely for the purpose of [*], provided that such activities shall [*], and neither Party shall have the right to [*] the other Party or [*] the other Party in connection therewith.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

5.8 Research Project Team. The Parties will establish a research project team (the "**Research Project Team**") that will be responsible for managing, reviewing and implementing the performance of the day to day activities of both Parties for all stages of the Research Program, including review and decision making regarding lead optimization, safety evaluation, structural biology, computational chemistry and pharmacology. Each Party will have representation on the Research Project Team throughout the Research Program. The Research Project Team shall be subordinate to and governed by the JRC.

ARTICLE 6
DEVELOPMENT

6.1 General. Subject to the terms and conditions of this Agreement, the Parties will collaborate with respect to the Development of the Compounds and Collaboration Products in the Collaboration Indications for Regulatory Approval under the direction of the JDC and pursuant to the Development Plan, as set forth in more details below. The Parties intend to pursue Development of the Compounds and Collaboration Products broadly across an array of Indications.

6.2 Development Plan.

(a) The Development of the Compounds and Collaboration Products under this Agreement (the "**Development Program**") shall be conducted pursuant to a comprehensive written Development plan (the "**Development Plan**"). The Development Plan for each Compound and corresponding Collaboration Products shall set forth the timeline and details of: (i) all preclinical and clinical Development activities to be conducted by the Parties as necessary to generate data sufficient to meet the requirements for Marketing Approval of such Compound and corresponding Collaboration Products for each of the Indications as agreed by the Parties and set forth in the Development Plan; (ii) the protocol synopsis for each clinical trial included in such Development Plan; (iii) a Manufacturing plan; and (iv) any other Development activities that the Parties agree to pursue in collaboration for such Compound and corresponding Collaboration Products. The Parties agree that: (A) the Development Plan will contain detailed plans for at least [*] covered by the Development Plan, and summary plans for periods thereafter, and (B) the budget associated with such Development Plan shall be subject to the approval process set forth in Section 6.2(b). The Development Plan shall include a coordinated development and regulatory strategy, including the Parties' respective roles in the development of each Collaboration Product and the countries in which Development of Collaboration Product will occur. The Development Plan shall also set forth: (1) a detailed budget of the Development activities to be [*]; (2) if Cytokinetics has exercised the Cytokinetics Co-Funding Option for a Collaboration Product and [*] for such Collaboration Product, a detailed budget for [*] of such Collaboration Product in the [*] Indications (the "[*]"); and (3) if [*] Indication [*] the Collaboration and [*] for such [*] Indication, a detailed budget for such [*] Indication Development Work (the "[*] **Indication Development Budget**"). Upon the other Party's reasonable request, each Party shall [*] Development activities under the Development Plan. The [*] shall be included in the Development Plan and [*] shall be subject to JDC approval.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

(b) The JDC shall update the Development Plan (including [*], as applicable) at least annually, with such annual update to be finally approved no later than [*] of the preceding Astellas' fiscal year, provided that [*] Indication [*] subject to the [*] the JDC (and [*] Indication [*] after [*] for such Indication. By [*] of each calendar year, [*] Development activities are [*] the updated Development Plan, the JDC shall agree upon a proposed [*] for the following Astellas fiscal year. Astellas shall use good faith efforts to [*]. From time to time during the Term, the JDC shall prepare amendments, as appropriate, to the then-current Development Plan (including [*], as applicable), including adding additional Compounds and Collaboration Products as well as additional Indications added to the Collaboration pursuant to Article 4. The JDC shall have the right to approve updates and amendments to the Development Plan (including [*], as applicable), provided that [*] subject to the [*] the JDC (and [*] for such Indication. Once approved by the JDC, such revised Development Plan shall replace the prior Development Plan.

(c) If the terms of the Development Plan contradict, or create inconsistencies or ambiguities with, the terms of this Agreement, then the terms of this Agreement shall govern.

6.3 Allocation of Development Responsibilities. The Development Plan shall allocate Development responsibilities of the Compounds and Collaboration Products between the Parties as follows:

(a) **Astellas Responsibilities**. Subject to Sections 6.3(b), 6.3(c) and 6.3(d) below, Astellas shall be primarily responsible for the Development of [*] Activators and corresponding Collaboration Products: (A) in the Licensed Indications and [*] Indications throughout the world; (B) in [*] Indications for [*] in the Shared Territory and [*] Development activities in Astellas Territory; and (C) and [*] Indications unless Astellas [*] the conduct of such [*] or as otherwise set forth in Article [*], in each case pursuant to the Development Plan. While it is contemplated that Cytokinetics shall be responsible for the Phase 1 Work and Early Stage Work as described in subsection (b) below, the JDC may allocate to Astellas specific clinical and non-clinical activities to be conducted in parallel with the Phase 1 Work and/or Early Stage Work [*].

(b) **Cytokinetics Responsibilities**. Notwithstanding Section 6.3(a), Cytokinetics shall be responsible for the conduct of:

(i) the Phase 1 Clinical Trials of the Compounds (including [*] but excluding [*] Development activities in the Astellas Territory) and Phase 2 readiness activities in Licensed Indications (including [*] but excluding any activities allocated to Astellas pursuant to subsection (a) above) pursuant to the Development Plan through the initiation of the first Phase 2 Clinical Trial for each Compound in Licensed Indications (the "**Phase 1 Work**");

(ii) the Development activities for the Compounds in [*] Indications prior to [*] (but excluding any [*] Development activities in the Astellas Territory) (the "**Early Stage Work**"), and, subject to the Parties' mutual agreement, in Licensed Indications;

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

(iii) other Development activities for the Compounds in [*] Indications allocated to Cytokinetics by the JDC, taking into consideration [*] of the Collaboration and [*];

(iv) all Development activities for [*] Activators in [*]Indications to generate [*] for such Compounds in such Indications (the "[*] **Indication Development Work**"), including [*] (to the extent provided in Article [*]) in connection with such Development activities but excluding [*] for any [*] Indication [*] and [*]; and

(v) other Development activities under the Development Plan [*].

(c) Development in [*] **Indications**.

(i) Notwithstanding Section [*] shall have the right, but not the obligation, to conduct Development activities for Compounds and Collaboration Products in [*] Indication(s) [*] as set forth in this Section 6.3(c) ("[*] **Indication Development**").

(ii) [*] and shall not be subject to the [*] set forth in Section [*]. [*] shall have the right, but not the obligation, to [*] Compounds and Collaboration Products [*] Indication pursuant to subsections (iv) through (vi) below.

(iii) In addition to [*] as set forth in subsection (ii) above, [*] Development Plan [*] Development activities for one or more Collaboration Products for [*] Indication, [*] Development activities for such Indication [*] the Development Plan [*] Development in such Indication in accordance with the Development Plan, [*] such Indication as a [*] Indication. Upon [*] such Indication [*] Indication, provided that, in [*] Development in such Indication under the Development Plan will [*] the Development and/or Commercialization of Compound and Collaboration Product in Indications [*] Developed and/or Commercialized [*] pursuant to the Development Plan and/or Commercialization Plan.

(iv) [*] Indication Development, [*] a reasonably [*]. [*] by the JDC, such [*] the Development Plan and such [*] Indication Development shall be conducted pursuant to such plan. If such [*] Indication is not already [*] Indication, it shall then be designated as either [*] Indication or [*] Indication, as appropriate.

(v) [*] Indication Development as part of the regular JDC reporting cycle. Following the [*] Indication Development for a Compound and corresponding Collaboration Product in a [*] Indication Development as well as the [*] Indication Development for such Collaboration Product [*] as well as the [*] the Development of such Compound or Collaboration Product in such Indication [*]; provided that if such [*] Indication is [*] as set forth in Section [*].

(vi) [*] such Development work, then (A) [*] Indication Development [*] as set forth in Section [*]; (B) [*] such Compound and Collaboration Product in such Indication as set forth in Section [*]; and (C) all [*] Development in such [*] Indication shall

be subject to the [*] under this Agreement applicable to the Development for [*] Indications other than [*] Indication, and the [*] the Development Plan and Cytokinetics Development Budget to include such continued Development work in such [*] Indication, including allocation of the Parties' respective responsibilities for [*] Development work (i.e., the Parties' respective activities in [*]).

(vii) [*] such Development work, then such Compound and Collaboration Product will [*] Indication; provided that if the Development of such Compound or Collaboration Product in such [*] Indication [*] or otherwise by the Parties, then Section [*] shall apply.

(d) Development in [*] **Indications; Lead Party Responsibilities**. Subject to [*] the Development of [*] Activators in [*] Indications, for as long as [*] such Development, the Parties [*] with respect to Development activities for [*] Indications, except that:

(i) Cytokinetics shall lead all [*] Indication Development Work, including [*] (to the extent provided in Article [*]) in connection with such Development activities, to generate [*] in the Shared Territory. Subject to Section 6.3(d)(iii), Astellas shall lead all [*] Indication Development Work, including all [*] (to the extent provided in Article [*]) in connection with such Development activities, pertaining to [*] in the Shared Territory and [*] in the Astellas Territory. For clarity, [*] for such Indication [*] such Indication and [*].

(ii) Notwithstanding anything to the contrary, including Section [*], the Party designated to lead certain [*] Indication Development Work (which includes [*] and, to the extent provided in Article [*] in connection with such Development activities) shall have the right to make decisions concerning the operation of such activities without the approval of the JDC as far as such activities are being conducted under the Development Plan (but shall keep the JDC reasonably informed on its conduct of such activities, at a level of detail reasonably requested by the other Party, as part of the regular JDC reporting cycle); and

(iii) In the event that [*] further right to [*] Indication Development Work for such Indication [*] shall have the [*] Indication [*], provided, however, that [*] shall consider in good faith [*] with respect to the [*] shall keep the JDC reasonably informed on its conduct of such Development activities at a level of detail [*] as part of the regular JDC reporting cycle.

6.4 Development Costs.

(a) General. Except as set forth in Sections 6.4(b), (c) and (d) below, Astellas shall be solely responsible for all Development Costs incurred by or on behalf of either Party in performing Development activities under the Development Plan, and shall reimburse Cytokinetics for Development Costs incurred by Cytokinetics as set forth in Section 11.3(a), to the extent [*].

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

(b) **Development Costs for** [*] **Indication Development.** [*] the Development Costs incurred by or on behalf of [*] Indication Development (the "[*] **Indication Development Costs**"); provided that if [*] the Development of any Compound or Collaboration Product in any [*] Indication that were the [*] Indication Development after [*] as set forth in Section [*]. The Development Costs incurred by either Party in the continued Development in such Indication [*] Indication Development shall be [*] as set forth in Section [*] above.

(c) **Development Costs in** [*] **Indications.** If [*] with respect to a [*] Activator and subject to the [*] set forth in Section [*] for such [*], to the extent [*] Budget as approved by the JDC [*]. [*] pursuant to Section [*]. [*] Development Costs for the [*] Indications.

(d) **Development Costs in** [*] **Indications.** For all [*] Indications, subject to the [*] set forth in Section [*] Development Costs, provided that [*] Development Budget as approved by the JDC [*]. [*] pursuant to Section [*]. [*] Development Costs for [*] Indications, including the [*] Development activities [*] in the Shared Territory and [*] in Astellas Territory for [*] Activators in [*] Indications.

6.5 **Diligence**.

(a) Each Party shall use Diligent Efforts to conduct the Development activities assigned to it under the Development Plan. Without limiting the foregoing, [*]:

(i) [*] set forth in the Development Plan; and

(ii) [*] (i.e., a [*] Activator) and [*] Activator) [*]). If [*] for a particular [*] at any time after the [*] immediately following the [*] will be deemed to [*] pursuant to Section [*] with respect to Compounds and Collaboration Products [*], provided that [*]. In such event, Section [*] shall apply with respect to [*] shall no longer apply with respect to [*].

(b) [*] Compound or Collaboration Product if: (i) [*] such Compound or Collaboration Product are [*] Development Plan in a [*] such Compound or Collaboration Product, and [*] in accordance with the Development Plan; or (ii) [*] such Collaboration Product.

(c) In the event of [*] Compound or Collaboration Product [*], the Parties shall [*]. In the event the [*] shall be subject to [*] in accordance with [*] set forth in Section [*].

(d) Without limiting [*] set forth herein, [*] the Development of the Compounds. [*] Compound [*] Indication [*] shall have the right (but not the obligation) to [*] Indication [*] Indication and [*] Compound [*] Indication in accordance with Section [*]. [*] such Development [*] Indication shall [*] under Section [*].

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

(e) Without limiting [*] set forth herein, [*] Activators for Development [*] Indications, and [*] Activators for Development [*] Indication(s). [*] pertaining to the [*] Activators, [*] Development activities [*] Activator [*] Indication, then:

(i) [*] Activators with respect to [*] Indications [*] Indications [*];

(ii) [*] Activators [*] Indications [*] notwithstanding Section [*] Indications [*] provided that [*] Development activities for a [*] Activator [*] Indication [*] Development under the Development Plan [*] Activator in any [*] Indication or any [*] Indication under this Agreement; and

(iii) [*] the Collaboration relating to [*] Activators [*] with respect to [*] Indications. [*] Activators in the [*] Indications in accordance with this Section 6.5(e).

6.6 Advancement to Phase 2.

(a) Cytokinetics will be the Party responsible for the Phase 1 Work as described in Section 6.3(b)(i). In connection therewith, Cytokinetics will: (i) hold the applicable Compound INDs; (ii) be the lead Party interacting with the Regulatory Authorities on matters pertaining to the Development of such Compounds and Collaboration Products; and (iii) Manufacture and supply such Compounds and Collaboration Products for use in such Development activities. Cytokinetics shall provide the JDC with the data and results from the Phase 1 Work on an ongoing basis. Concurrently with Cytokinetics' conduct of the Phase 1 Work, the Parties, through the JDC, shall jointly plan for the initiation of the first Phase 2 Clinical Trial for such Compound by agreeing on the initial Indication to be pursued, drafting the study protocol and related documents and planning for the conduct of such Clinical Trial.

(b) For [*], promptly following completion of the Phase 1 Work (including any additional Phase 1 Clinical Trials, PK studies, formulation work or meetings with Regulatory Authorities that may be added through amendments to the Development Plan) by Cytokinetics, and other Phase 2a enabling studies conducted by Astellas in parallel with Phase 1 Work (including any additional studies or meetings with Regulatory Authorities that may be added through amendments to the Development Plan) and in any event, [*] the JDC will determine whether or not to advance such Compound into a Phase 2 Clinical Trial [*]. Astellas may conduct Phase 2 enabling studies for such Compound in accordance with the Development Plan prior to and following the [*]. [*] in accordance with the Development Plan [*] as determined by the JDC (e.g., [*]. [*] from the applicable [*] if the JDC determines that such [*] Compound into the first Phase 2 Clinical Trial [*], provided that [*] described in the Development Plan. If the JDC does not decide to advance such Compound into a Phase 2 Clinical Trial [*], Cytokinetics will have the option to advance such Compound into a Phase 2 Clinical Trial [*].

6.7 Development Records. Each Party shall maintain complete, current and accurate records of all Development activities conducted by it hereunder, and all data and other information resulting from such activities. Such records shall fully and properly reflect all work done and results achieved in the performance of the Development activities in good scientific manner [*]. Each Party shall document all non-clinical studies and clinical trials in formal written study reports according to applicable Laws and national and international guidelines (e.g., ICH, GCP, GLP, and GMP). Each Party shall have the right to review and copy such records maintained by the other Party at reasonable times and to obtain access to the original [*].

6.8 Data Exchange and Development Reports. In addition to adverse event and safety data reporting obligations pursuant to Section 7.5, each Party shall promptly provide the other Party with copies of all data and results generated by or on behalf of such Party in the course of performing the Development hereunder (including final reports), and including, in each case of data arising from clinical trials, [*] as the JDC may agree from time to time. The Party receiving such data shall have the right to use and reference such data to perform its obligations or to exercise its rights under this Agreement, including as set forth in Section 7.1(f). Each Party shall provide the JDC with regular reports detailing its Development for the Collaboration Products, and the results of such Development at each regularly scheduled JDC meeting. The Parties shall discuss the status, progress and results of each Party's Development at such JDC meetings.

6.9 Advisory Panels; Medical Education Activities. The Development Plan may also provide for advisory panels with key opinion leaders with respect to the Development of Collaboration Products to be held by one or both Parties. The Party organizing the advisory panel shall give the other Party written notice at least [*] in advance of any such advisory panel meetings, and the other Party shall have the right to attend such meetings. If the Parties agree to conduct non-promotional medical education activities and the JMAC has not been established at that time, the Parties shall conduct non-promotional medical education activities as part of the Development Activities under the Development Plan and under the oversight of the JDC, and [*] in connection therewith shall [*] provided that, if for any Collaboration Product, [*] such medical education activities [*] medical education activities for such Collaboration Product, then [*] shall have the right to conduct such medical education activities for such Collaboration Product under the JDC's oversight, and, [*] such medical education activities shall be: (a) [*] medical education activities for such Collaboration Product under the Development Plan and (b) [*] such activities. If the non-promotional medical education activities [*] Compounds, the Parties shall discuss in good faith an appropriate [*] each Party. Nothing in this Section 6.9 will [*] scientific and/or medical conferences, or [*] continuing medical education activities [*] Compounds.

6.10 Development Project Team. The Parties will establish a project team for each Compound (the "**Development Project Team**") at the time JRC decides to initiate IND-enabling studies for such Compound. The Development Project Team will be responsible for managing, reviewing and implementing the performance of the day to day activities of both Parties for all

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stages of the Development Program for such Compound, including review and decision making regarding CMC, toxicology, clinical trial designs and regulatory filings and strategy. Each Party will have representation on the Development Project Team for the rest of the Development Program. The Development Project Team shall be subordinate to and governed by the JDC (except with respect to CMC issues, with respect to which the Development Project Team will be subordinate to and governed by the JMC).

ARTICLE 7
REGULATORY

7.1 Regulatory Responsibilities.

(a) The Development Plan shall set forth the regulatory strategy for seeking Marketing Approval for the Compounds and Collaboration Products by the FDA, EMA and other Regulatory Authorities in [*] as agreed upon by the Parties. [*] Development under the Development Plan (including the [*] Development), [*] necessary to obtain and maintain Regulatory Approval of the Compounds and Collaboration Products in the Collaboration Indications throughout the world, which activities shall be conducted using Diligent Efforts and in accordance with the regulatory strategy set forth in the Development Plan. For the Development Plan, the regulatory strategy will be set by Astellas except where [*]; in such case [*]. For the Development Plan, Cytokinetics will set the regulatory strategy for [*] except when [*] in the Shared Territory [*] for [*] Indications [*] in the Shared Territory, and Astellas will set the regulatory strategy for [*] Indications for the Astellas Territory. Except where [*] regulatory activities related to [*].

(b) Cytokinetics shall hold the applicable Compound IND during the conduct of the Phase 1 Work and, if applicable, Early Stage Work. Prior to the [*], Cytokinetics shall transfer the applicable Compound IND [*] to Astellas, unless the JDC [*] as set forth in Section 6.3(b)(iii), in which case Cytokinetics shall continue to hold the applicable Compound IND and Regulatory Materials related to such Development work.

(c) [*] Regulatory Materials for [*] Activators for [*] Indication to support the Development of such Compound in such Indications in the Shared Territory. If [*] Activator for [*] Indication or [*] Indication [*] Indication. [*] regulatory strategy in the Development Plan for [*] (but excluding [*] in the Shared Territory [*]) for such [*] Indications [*] in the Shared Territory. If [*] Indication, [*] regulatory activities related to [*] Activators for such Indication. If [*] the right to [*] a Collaboration Product in the Shared Territory [*] as set forth in Section [*] shall have the right to [*] pertaining to such Collaboration Product in the Shared Territory [*].

(d) In addition, [*] shall be responsible for [*] regulatory activities related to [*] Development (including [*] applicable Regulatory Authorities) until the JDC [*] the Development of [*] Indication under Section [*].

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(e) [*] in connection with [*] under Sections 7.1(b), (c), and (d) will be [*] Indication [*] Indication [*], as applicable.

(f) Astellas hereby grants Cytokinetics and its Affiliates and (sub)licensees the right to reference any IND and other Regulatory Materials Controlled by or on behalf of Astellas or its Affiliates for use in the Development by Cytokinetics in accordance with this Agreement, and Cytokinetics hereby grants Astellas, its Affiliates and sublicensees the right to reference any IND for Compounds and/or Collaboration Products and other Regulatory Materials Controlled by or on behalf of Cytokinetics or its Affiliates for use in the Development by Astellas, its Affiliates and sublicensees in accordance with this Agreement. Each Party hereby grants the other Party the right to use any data resulting from such Party's activities under this Agreement to perform its obligations or to exercise its rights under this Agreement. Each Party may file its own IND(s) and other Regulatory Materials for each [*] Activator to support its Development work under this Agreement, which may cross reference the other Party's IND(s) and other Regulatory Materials for such [*] Activator.

(g) Except as set forth in Sections 7.1(b), (c) and (d) above and otherwise agreed in writing by the Parties, [*] shall be responsible, [*] for the Collaboration Products [*]. Without limiting the foregoing:

(i) Astellas shall file its own IND(s) for the Development of the Compound(s) for the activities allocated to it under the Development Plan and Astellas shall have the right to cross reference the applicable Compound IND(s) if necessary.

(ii) Astellas shall hold IND(s) and other Regulatory Materials for [*] Activators for each [*] Indication to support the Development of such Compound in such Indication in the Astellas Territory, and Astellas shall [*] for such Indication in the Astellas Territory.

(iii) [*] shall be responsible for regulatory activities related to [*] Activators for each [*] Indication, unless [*] for such Indication.

7.2 Cooperation. Each Party shall cooperate reasonably with the other Party with respect to key regulatory activities relating to the Compounds and Collaboration Products, shall provide such other Party with all reasonable assistance in the preparation and filing of Regulatory Materials relating to the Compounds and Collaboration Products, and shall keep such other Party reasonably and timely informed of its preparation and submission of all Regulatory Materials relating to the Compounds and Collaboration Products and the Regulatory Authorities' review of such Regulatory Materials. Without limiting the foregoing, each Party:

(a) shall consult with the other Party through the JDC or JCC, as applicable, regarding regulatory matters pertaining to [*] Regulatory Materials [*] relating to the Compounds and Collaboration Products, including plans, strategies, filings, reports, updates and supplements in connection therewith. As used herein, "[*] **Regulatory Materials**" means IND and MAA filings, [*] or materials that: (i) are [*] a Regulatory Authority; (ii) contain [*] such Regulatory Authority; (iii) contain [*] to such Regulatory Authority; or (iv) [*] the relevant Compound or Collaboration Product or its Development or Commercialization;

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(b) shall provide the other Party with drafts of any [*] Regulatory Materials for the Compounds and Collaboration Products to be submitted by such Party to the Regulatory Authority in [*] days prior to submission for review and comment (or if [*] such as in the event of [*] by Regulatory Authority that [*] but in no event in a manner that would [*] such reporting or response), and shall consider in good faith any comments received from the other Party;

(c) shall provide the other Party with copies of [*] Regulatory Materials ([*] (as defined below)) submitted to the Regulatory Authority [*] for each calendar month as well as copies of [*] correspondence [*] received from the Regulatory Authority [*] pertaining to the Compounds and Collaboration Products for [*] Business Days [*]. [*] to a Regulatory Authority that: (i) is [*] from a Regulatory Authority or is in response to an administrative request or inquiry from a Regulatory Authority; (ii) contains [*] provided to such Regulatory Authority; (iii) contains [*] to such Regulatory Authority; (iv) [*] the receiving Regulatory Authority [*] to the relevant Compound or Collaboration Product or its Development or Commercialization; and (v) is required by Laws to be periodically filed to an existing IND or MAA. [*] includes correspondence such as [*], notifications and non-substantive amendments, but excludes all [*]; and

(d)shall provide the other Party written minutes or other records of any oral key discussions (such as Type A, Type B and Type C meetings in the U.S. and foreign similar or equivalent meetings) with the Regulatory Authority [*] pertaining to the Compounds and Collaboration Products promptly after any such discussion.

For purpose of Section 7.2, the Parties shall establish a direct line of contact between the persons responsible for the overall regulatory strategies and activities for the Collaboration Products within each Party.

If any [*] to be provided under Section [*] was originally [*] the providing Party shall provide [*] to the receiving Party at the [*] except the case where such Party reasonably believes such [*] such as in the event of [*] by Regulatory Authority that [*].

7.3 Meetings with Regulatory Authorities. Each Party shall provide the other Party with at least [*] days advance notification of key in-person meeting or teleconference (such as [*] in the U.S. and foreign similar or equivalent meetings) with the Regulatory Authorities [*] that relates to the Development of the Compounds and Collaboration Products under the Development Plan. Such other Party shall have the right, but not the obligation, to have its representatives attend (but, unless otherwise requested by the Party responsible for such meeting, not participate in) such meetings.

7.4 Product Complaints. Each Party shall be responsible for handling product complaints (except for those covered by Section 7.5 below) arising pursuant to its Development of the Compounds and Collaboration Products in compliance with all applicable Laws. Each Party shall promptly provide the other Party with written notice of any such product complaint received by such Party and arising pursuant to its Development. Upon request of either Party,

the Parties shall convene a meeting to discuss such product complaint and collaborate to resolve any such product complaint. Astellas shall be responsible for handling product complaints (except for those covered by Section 7.5 below) relating to marketed Collaboration Products in compliance with all applicable Laws.

7.5 Adverse Events Reporting. If applicable, at least [*] prior to the [*] Development [*] Development or as otherwise may be required to satisfy regulatory requirements, the Parties shall enter into a pharmacovigilance agreement setting forth the worldwide pharmacovigilance procedures for the Parties with respect to the studies for the Collaboration Products (the "**Pharmacovigilance Agreement**"). The Pharmacovigilance Agreement shall be in accordance with, and enable the Parties to fulfill, local and national regulatory reporting obligations under applicable Laws. The Parties shall discuss and agree on the update of the Pharmacovigilance Agreement to include obligations related to Commercialization of the Collaboration Products prior to Regulatory Approval in any given territory.

7.6 Notification of Threatened Action. Each Party shall 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 Collaboration Product or the continued marketing of any Collaboration Product. Upon receipt of such information, the Parties shall promptly consult with each other in an effort to arrive at a mutually acceptable procedure for taking appropriate action.

7.7 Remedial Actions. Each Party shall notify the other immediately, and promptly confirm such notice in writing, if it obtains information indicating that any Collaboration Product may be subject to any recall, corrective action or other regulatory action with respect to the Collaboration Product taken by virtue of applicable Law (a "**Remedial Action**"). The Parties shall fully assist each other in gathering and evaluating such information as is necessary to determine the necessity of conducting a Remedial Action. Each Party shall (and, in case of Astellas, shall ensure that its Affiliates and sublicensees shall) maintain adequate records to permit the Parties to trace the Manufacture, distribution and use of the Collaboration Products. Astellas shall have sole discretion with respect to any matters relating to any Remedial Action, including the decision to commence such Remedial Action and the control over such Remedial Action, at its cost and expense.

7.8 Collaboration Products [*]**.** Notwithstanding anything to the contrary in this Article 7, in the event that [*] Collaboration Product in the Shared Territory [*] pursuant to Section [*], then Sections [*] (with the Parties' [*]) to such Collaboration Product in the Shared Territory [*].

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ARTICLE 8
MANUFACTURING AND SUPPLY

8.1 General. The Manufacture of the Compounds and Collaboration Products, including all process and formulation development in connection therewith, including CMC Activities, shall be overseen and coordinated by the JMC and conducted pursuant to the Manufacturing plan included in the Development Plan and the Commercialization Plan. At each regularly scheduled JMC meeting, each Party shall provide the JMC with reports summarizing its Manufacturing activities and the results of such activities and [*] Compound and Collaboration Product [*] such Party under this Agreement [*]. The Parties acknowledge that it is in the Collaboration's interest that, for each Collaboration Product under Development, the clinical trial materials for Development be made with the same process under the JMC's oversight.

8.2 Transfer of Manufacturing Know-How to Astellas.

(a) Technology Transfer. The Parties intend that [*] the Manufacture of the Compounds and Collaboration Products (including the Compounds and Collaboration Products [*]). To this end, promptly following the [*] or at the timing agreed by the JMC but in any event [*] the Compounds and Collaboration Products for the [*] and provided that the [*] Development of such [*], the JMC shall establish the procedures for Cytokinetics to effect the transfer to Astellas of the Cytokinetics Know-How that is then being used by Cytokinetics or its Third Party manufacturer in the Manufacture of such Compound and Collaboration Product, to the extent such Cytokinetics Know-How is not already in Astellas' possession. Cytokinetics shall conduct such technology transfer as soon as practicable in accordance with such procedures, [*].

(b) Assistance. In connection with the transfer of Know-How under this Section 8.2, Cytokinetics shall provide reasonable technical assistance at Astellas' request [*]. Such technical assistance shall be included as an element of the Development Plan [*].

8.3 [*] **Supply**. Subject to Sections [*] shall be responsible, itself and/or through Affiliates or Third Party contract manufacturers, for the Manufacture and supply of [*] Compounds and Collaboration Products for use [*] in the Development and Commercialization under this Agreement, [*].

8.4 [*] **Supply**.

(a) Notwithstanding Section [*], (i) [*] shall Manufacture and supply the [*] as agreed by the JMC, under the Development Plan and the [*] associated therewith will be [*], (ii) [*] shall have the right, but not the obligation, to Manufacture and supply the Compounds and Collaboration Products to conduct [*] Development as set forth in [*], and (iii) if [*] Activator in [*] Indication, [*] have the obligation, and [*] shall have the right, to Manufacture and supply such Compound and related Collaboration Product for use in the Development and Commercialization of such Compound and Collaboration Product in such Indication.

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(b) With respect to [*] Development, [*] shall have the right to elect to either (i) [*] the applicable Compounds and Collaboration Products [*] Development if (a) [*] [*] Manufacturing [*] such Compounds and Collaboration Products for [*] under the Development Plan or the Commercialization Plan, to be provided [*]; or (ii) [*] such Compound and/or Collaboration Products [*] in which event, [*] then being used by [*] the Manufacture of the Compounds and Collaboration Products to the extent necessary or useful for [*] Manufacture such Compounds and Collaboration Products. Promptly following [*] Development and provided that (x) the JDC [*] has determined to [*] in accordance with Section [*] and (y) [*] Manufactures or has Manufactured such Compound and/or Collaboration Products [*] for such Development work, the JMC shall [*] that is then being used [*] such Compound and such Collaboration Product, to the extent [*] is not already [*]. [*] as soon as practicable in accordance with [*]. In connection with the [*] under this Section 8.4, [*]. [*] shall be included [*] the Development Plan and [*].

(c) With respect to [*] Activator in [*] Indication, where [*] such Indication if [*] Manufacture and supply such Compound and related Collaboration Product for use in the Development and Commercialization of such Compound and Collaboration Product in such Indication, or if [*] Manufacture and supply [*] such Compound and Collaboration Product for such use, then such Party shall promptly notify the other Party, and [*] then being used [*] Manufacture of such Compound and Collaboration Product to the extent [*] Manufacture such Compound and Collaboration Product, [*] Manufacture and supply [*]such Compound and Collaboration Product [*]. [*] and for any [*] to the extent [*] to the extent that it [*] Development [*] Indication(s) and/or [*] Indication(s).

(d) If the Parties mutually agree, [*] Manufacture and supply, and [*], such Collaboration Product for use in the Development and Commercialization of such Collaboration Product in such Indication. In such event, [*] such Collaboration Product to the extent [*] Manufacture and supply under this Agreement (e.g., if Astellas is compensated for such Manufacture and supply [*]), and shall have [*] as set forth in Section [*].

(e) If [*] (e.g., to [*] Compound or Collaboration Product or the Manufacture of a Compound or Collaboration Product) and [*] under Section [*]shall have the right to [*] and under the Development Plan. If [*] and the Parties [*] Compound or Collaboration Product for a [*] Indication [*] by the Parties or [*] (i.e., [*] Indication or [*] Indication, as applicable) of the Development [*] in connection with [*].

8.5 Manufacturing Records. Each Party shall promptly provide the other Party, upon its reasonable request for the purpose of this Agreement, copies of the Manufacturing records (including specifications, protocols, batch records, master batch records and other CMC Information) maintained by the first Party, its Affiliates or Third Party contractors pertaining to Compounds and Collaboration Products for such other Party's use in connection with the Manufacture of the Compounds and/or Collaboration Products under this Agreement (and in the case of [*]). Each Party hereby grants the other Party the right to reference (and have referenced by its contract manufacturer) the Drug Master Files, if any, maintained by the first Party, its Affiliates or Third Party contractors pertaining to Compounds

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and Collaboration Products for such other Party's use in connection with the Manufacture of the Compounds and/or Collaboration Products under this Agreement (and in the case of [*]). For as long as [*] Manufacture any Collaboration Product pursuant to Section [*] shall have the right to [*] such Collaboration Product [*] (it being understood such [*] the Collaboration Product so long as [*]), upon reasonable request by [*] mutually agreed upon by Astellas and Cytokinetics, provided that [*] have the right to [*]. As between the Parties, all [*] shall be deemed [*].

8.6 Manufactured Products. Each Party represents and warrants that all Compounds and Collaboration Products Manufactured and supplied by such Party for clinical trial and/or commercial use under this Agreement shall: (a) meet the applicable specifications; (b) be Manufactured in accordance with current Good Manufacturing Practices; and (c) be Manufactured in accordance with all applicable Laws, including any Governmental Authority requirements then in effect.

ARTICLE 9
COMMERCIALIZATION

9.1 General. Astellas shall have the primary responsibility, at its own expense, for all aspects of (including the conduct of) the Commercialization of the Collaboration Products in the Field throughout the world, subject to: (a) Cytokinetics' right to Co-Promote one or more Collaboration Product(s) in the Co-Promotion Territory or Shared Territory, as applicable and as set forth below, (b) Cytokinetics' right to establish certain Commercialization strategy in [*] Indications as set forth below, (c) Cytokinetics' right to Commercialize the Collaboration Product(s) in [*] Indications in the Shared Territory during the Cytokinetics Commercialization Period, and (d) other terms and conditions of this Article 9.

9.2 Commercial Diligence.

(a) Astellas shall use Diligent Efforts to Commercialize each Collaboration Product [*]. Without limiting the foregoing, and subject to subsection (b) below, Astellas shall [*] Collaboration Product [*] such Collaboration Product [*] in order to [*] such Collaboration Product, solely to the extent [*] such Collaboration Product [*] and provided that [*] to do so (the [*]).

(b) [*] a Collaboration Product [*] it shall give written notice to [*] together with [*] with respect to the Commercialization of such Collaboration Product [*]. The Parties shall meet and confer in good faith [*] and seek to agree on (i) [*] such Collaboration Product [*], or (ii) whether [*] such Collaboration Product [*] in accordance with Section [*]. If the Parties [*] under Section [*] such Collaboration Product [*]. [*] such Collaboration Product [*] such Collaboration Product [*] within the applicable time period. If [*] will be deemed [*] pursuant to Section [*] with respect to such Collaboration Product [*] provided that [*] within the applicable time period. If [*] will continue to [*] such Collaboration Product [*].

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

9.3 Commercialization Plan.

(a) No later than [*], subject to Sections 9.3(d) and 9.3(e), Astellas shall prepare and provide to the JCC for review and discussion a written plan for the Commercialization of such Collaboration Product in an Astellas' fiscal year (the "**Commercialization Plan**"). The Commercialization Plan shall include a reasonably detailed description of and anticipated timeline for the Parties', their respective Affiliates' and sublicensees' Commercialization activities with respect to such Collaboration Product, including pre-launch plans, launch plans, market analytics, product forecasts, pricing assumptions and competitive intelligence. It is the Parties' understanding that, [*] Astellas will be the Party primarily responsible for the conduct of the Commercialization activities under the Commercialization Plan. Each Party shall use Diligent Efforts to [*] of the collaboration under the Commercialization Plan (including [*]). The Parties agree that the Commercialization Plan and the applicable Commercialization strategy shall be consistent.

(b) If Cytokinetics exercises its Co-Promotion option for a Collaboration Product, the Commercialization Plan shall also include a reasonably detailed description of and anticipated timeline for Cytokinetics' Co-Promotion activities as well as a budget therefor, which shall be consistent with Section 9.6 below.

(c) Subject to Sections 9.3(d) and 9.3(e)(ii), Astellas shall periodically (at least on an annual basis) prepare updates and amendments to its Commercialization Plan to reflect changes in its plans, including in response to changes in the marketplaces and related product forecasts, relative success of the Collaboration Products and other relevant factors influencing such plans and activities. Subject to Sections 9.3(d) and 9.3(e)(ii), Astellas shall submit all updates and amendments to its Commercialization Plan to the JCC for review and discussion. For clarity, the Commercialization budget is subject to the final determination by the JCC, subject to [*], subject to Section 9.8. Cytokinetics may perform [*] activities within the scope of its responsibilities under the Commercialization Plan, [*].

(d) The Commercialization Plan (and any amendment thereto) for any Collaboration Product (i) for a [*] Indication, (ii) for [*] Indication for which Cytokinetics exercises the Cytokinetics Co-Funding Option [*], and (iii) subject to Section 9.3(e) and Section 9.8, for [*] Indication, must be agreed by the JCC by [*]. Neither Party shall conduct any Commercialization activities that are inconsistent with such agreed-upon Commercialization Plan and any Co-Promotion Agreement.

(e) With respect to the Commercialization of a Collaboration Product in [*] Indication, subject to Section 9.8, then:

(i) If Cytokinetics has an Established Commercial Infrastructure, Cytokinetics shall have [*] for the Commercialization strategy for such Collaboration Product for such Indication in the Shared Territory (but not for the Commercialization strategies with respect to such Collaboration Product as a whole), provided however, such Commercialization strategy and the overall Commercialization Plan shall be consistent.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

(ii) Regardless of [*] as relates to the portions of the Commercialization Plan for such Collaboration Product that are specific to such Indication for the Shared Territory, as well as any update and/or amendment thereof. The Commercialization strategy with respect to [*] Indications includes the following [*].

(iii) [*] the Shared Territory and the [*] Astellas and Cytokinetics as well as the [*] such Collaboration Product for such Indication, subject to the discussion and final determination by the JCC, taking into account [*].

(iv) Notwithstanding anything to the contrary, the [*] for such Collaboration Product in such Indication in a particular country will have the decision making authority with respect [*] and other terms of sale for such Collaboration Product in such Indication for such country, provided that the other Party may conduct, [*].

(v) If [*] the Collaboration Product(s) in such [*] Indication, but the Parties have not determined which Party will [*] for the Collaboration Product(s) in such [*] Indication under Section 9.8(b), then [*] shall be responsible for the pre-commercialization activities for the Collaboration Product in such [*] Indication.

(f) Subject to Section 9.3(c), Astellas shall be solely responsible for all costs incurred by or on behalf of either Party in performing their respective obligations under the Commercialization Plan except [*] (or [*] determined by the JCC), which shall be agreed between the Parties acting reasonably and in good faith [*], for its Co-Promotion activities as set forth in the Co-Promotion Agreement.

9.4 Patent Marking. Astellas (and Cytokinetics, if it Commercializes any Collaboration Product in the Shared Territory in [*] Indication, where [*] for such Indication) shall mark all Collaboration Products with patent information in each country in accordance with the applicable Law and to the extent customary in such country, and shall require all of its Affiliates and sublicensees to do the same. To the extent permitted by applicable Law and customary, Astellas shall indicate on Collaboration Product packaging, advertisement and promotional materials that such Collaboration Product is licensed from Cytokinetics.

9.5 Reports. Astellas (and Cytokinetics, if (a) it exercises its Co-Promotion option or (b) it Commercializes any Collaboration Product in the Shared Territory in [*] Indication, where [*] for such Indication) shall update the JCC at each regularly scheduled JCC meeting regarding its Commercialization of the Collaboration Products. Each such update shall be in a form to be agreed by the JCC and shall summarize its, its Affiliates' and its sublicensees' significant Commercialization activities with respect to the Collaboration Products throughout the world. The update by Astellas will be at a level of detail reasonably requested by Cytokinetics and sufficient to enable Cytokinetics to determine Astellas' compliance with its diligence obligations pursuant to Section 9.2.

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9.6 Co-Promotion Option.

(a) On a Collaboration Product-by-Collaboration Product, Indication-by-Indication, [*] basis, Cytokinetics shall have the right to elect to (i) co-promote each Collaboration Product for [*] Indications in the Co-Promotion Territory, and (ii) co-promote or promote each Collaboration Product for [*] Indications, and, if Astellas is the Party Commercializing such Collaboration Product, for [*] Indications, (collectively **"Neuromuscular Indications"**) in the Shared Territory, all as set forth in this Section 9.6.

(b) Unless otherwise agreed upon between the Parties, on a Collaboration Product-by-Collaboration Product, Indication-by-Indication, [*] basis, at least [*] prior to the [*] such Collaboration Product in such Indication [*] in the Co-Promotion Territory (or Shared Territory, for any Collaboration Product in Neuromuscular Indications) as set forth in the then-current Development Plan (the "[*] **Date**"), Astellas shall provide Cytokinetics with a written confirmation that [*]. Then:

(i) If the [*] Indication or [*] Indication, then, concurrent with [*], Astellas shall provide the JCC with a [*] on: (A) the [*] such Indication [*]; and (B) the [*] Astellas and Cytokinetics, for such Collaboration Product for such Indication [*]; and (C) [*] (such matters described in (A) and (B) collectively, the **"Co-Promotion Matters**", and such notice, the "**Astellas Co-Promotion Notice**").

(ii) If such [*] Indication, then, within [*], pursuant to Section 9.3(e)(iii), Cytokinetics shall provide the JCC with [*] the Co-Promotion Matters for such Collaboration Product for such Indication [*], as well as a [*] (the "**Cytokinetics Co-Promotion Recommendation**").

(iii) The JCC shall discuss [*] on the Co-Promotion Matters (which Co-Promotion Matters shall be subject to [*] if the matter [*]), in each case within [*] after its receipt of such Astellas Co-Promotion Notice or Cytokinetics Co-Promotion Recommendation, as applicable, taking into account [*] of the Collaboration (the "**JCC Determination**"). Notwithstanding the foregoing, the JCC Determination will [*] which will be agreed by the Parties in the applicable Co-Promotion Agreement.

(iv) Within [*] after receiving the JCC Determination, Cytokinetics shall have the right to exercise its option to Co-Promote such Collaboration Product for such Indication [*] in the Co-Promotion Territory (or to Co-Promote such Collaboration Product for such Neuromuscular Indication [*] in the Shared Territory) pursuant to such JCC Determination by written notice to Astellas. If Cytokinetics fails to provide such written notice within such [*] period, then Cytokinetics shall be deemed to have elected not to exercise its Co-Promotion option for such Collaboration Product for such Indication [*].

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

(v) In the event [*] determines that there is a reasonable likelihood that [*] such Collaboration Product for such Indication [*] shall promptly notify [*] in writing after such determination together with [*] therefor, and the [*] obligation to [*] obligation to [*] (and the period during which [*] shall be extended accordingly based on such [*].

(c) If Cytokinetics exercises its Co-Promotion option to co-promote a Collaboration Product for a particular Indication [*] the Co-Promotion Territory (or Shared Territory, for any Collaboration Product in Neuromuscular Indications), unless Cytokinetics terminates the Co-Promotion in accordance with Section 9.6(e) below, its Co-Promotion efforts for such Collaboration Product in such Indication (the "**Cytokinetics Co-Promotion Effort**") shall be determined by the JCC on a Collaboration Product-by-Collaboration Product, Indication-by-Indication [*] basis, but in any event shall be no less than [*] Collaboration Products for a particular Indication [*] the Co-Promotion Territory (or Shared Territory, for any Collaboration Product in Neuromuscular Indications), unless otherwise agreed in writing by the Parties. It is the Parties' understanding that Cytokinetics Co-Promotion Effort for the first Indication approved for any Collaboration Product in the Co-Promotion Territory [*] shall not be required to exceed [*].

(d) If Cytokinetics exercises its Co-Promotion option [*] a Collaboration Product for a particular Neuromuscular Indication [*] of the Shared Territory, unless Cytokinetics terminates the Co-Promotion in accordance with Section 9.6(e) below, Cytokinetics shall be responsible for [*] for such Collaboration Product for such Neuromuscular Indication and [*] of the Shared Territory (in which case, the Cytokinetics Co-Promotion Effort shall be [*] of the promotional efforts), unless otherwise agreed in writing by the Parties. For the avoidance of doubt, the Parties acknowledge that Cytokinetics' exercise of its Co-Promotion option to [*] for the case where [*] are expected to be [*] of the Shared Territory for an Indication pursuant to the JCC Determination.

(e) If Cytokinetics exercises its Co-Promotion option for a Collaboration Product for a particular Indication [*] of the Co-Promotion Territory (or Shared Territory, for any Collaboration Product in Neuromuscular Indications), it shall have the right to continue to Co-Promote such Collaboration Product for as long as such Collaboration Product is being sold for such Indication [*]. Cytokinetics shall have the right to relinquish its Co-Promotion rights for such Collaboration Product for such Indication [*] written notification to Astellas, in which case the Parties shall reasonably cooperate to transition to Astellas all of Cytokinetics' Co-Promotion activities with respect to such Collaboration Product for such Indication [*], so as to minimize disruption to sales activity and the Parties shall [*] for such transition. In such event, Cytokinetics shall withdraw its sales representatives from such Co-Promotion activities in a professional manner. If Cytokinetics [*] a Collaboration Product for the [*] such Collaboration Product is [*], then Cytokinetics shall have the right to [*] such Collaboration Product.

(f) If Cytokinetics exercises its Co-Promotion option for a Collaboration Product, Astellas shall [*] in the Co-Promotion Territory (or Shared Territory as applicable) based on the Cytokinetics Co-Promotion Efforts. However, if [*] for a particular Indication [*]

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shall so notify [*] in the applicable [*], and the Parties will discuss in good faith through the JCC [*] Cytokinetics' exercise of its Co-Promotion option applicable to such Collaboration Product for such Indication [*]. In addition, the JCC shall take into account [*] sales force, such as [*] in each case [*].

(g) Promptly after Cytokinetics exercises its Co-Promotion option for a Collaboration Product in the Co-Promotion Territory (or Shared Territory, for any Collaboration Product in Neuromuscular Indications), the Parties, in case of Astellas, Astellas and/or its Affiliate, as applicable, shall commence negotiations in good faith and enter into one or more co-promotion or promotion agreement(s) (the "**Co-Promotion Agreement**") in accordance with the terms and conditions set forth in **Exhibit I** attached hereto for such Collaboration Product, allowing for any future exercise by Cytokinetics of its Co-Promotion option for the same Collaboration Product in other Indications subject to different allocation of Cytokinetics Co-Promotion efforts as applicable. The Parties shall use Diligent Efforts to enter into and execute the applicable Co-Promotion Agreement within [*] following Cytokinetics' exercise of its Co-Promotion option.

9.7 Commercial Operating Team. The JCC will establish an operating team for each Collaboration Product (the "**Commercial Operating Team**") [*] in which Cytokinetics exercises its Co-Promotion option, which will be responsible for managing, reviewing, and implementing the performance of the day-to-day responsibilities of both Parties for all stages of the commercialization program for such Collaboration Product [*] in accordance with the Commercialization Plan, including review and decision making regarding plans for manufacture, promotion, marketing, sale, and distribution. Each Party will have representation on the Commercial Operating Team for such Collaboration Product [*] throughout the commercialization of such Collaboration Product [*] under this Agreement. The Commercial Operating Team shall be subordinate to and governed by the JCC.

9.8 Cytokinetics Commercialization Period. Notwithstanding anything to the contrary, during the Cytokinetics Commercialization Period, Cytokinetics shall be responsible (subject to subsection (b) below) for the Commercialization of Collaboration Products in the Shared Territory for each [*] Indication for which [*]:

(a) During the Cytokinetics Commercialization Period, if any, Cytokinetics shall have the sole right to Commercialize the Collaboration Product(s) in the Shared Territory, and Astellas shall have the sole right to Commercialize the Collaboration Product(s) in the Astellas Territory, in each case in accordance with the Commercialization Plan.

(b) Specifically and without limiting the foregoing, during the Cytokinetics Commercialization Period, Cytokinetics [*] sales of such Collaboration Product(s) in the Shared Territory if at such time: (i) Cytokinetics has an Established Commercial Infrastructure and (ii) there is [*] Collaboration Product [*] Indication, and subject to the [*] set forth in Section [*]. If the foregoing conditions are not met, then (A) Astellas will [*] of such Collaboration Product(s) in the Shared Territory, and (B) the Parties shall discuss in good faith and agree on the [*] in connection with [*] subject to the payment obligations set forth in Section [*].

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

(c) At the end of the Cytokinetics Commercialization Period, Astellas shall [*] of such Collaboration Product(s) in the Field worldwide. If Cytokinetics [*] of such Collaboration Product(s) in the Shared Territory during the Cytokinetics Commercialization Period, the Parties shall collaborate to transition the [*] such Collaboration Product(s) in the Shared Territory from Cytokinetics to Astellas pursuant to a process to be agreed to by the JCC by consensus. The Parties will endeavor to [*] Cytokinetics and to [*] of the Collaboration.

9.9 Established Commercial Infrastructure. For the purpose of this Agreement, "**Established Commercial Infrastructure**" means, with respect to Cytokinetics, it has plans to launch within [*] or has launched one or more product(s), either under this Agreement or otherwise, that address a comparable market opportunity in the applicable therapeutic area. For clarity, Cytokinetics shall be deemed to have an Established Commercial Infrastructure in a country if Cytokinetics has received Marketing Approval for Tirasemtiv or a Fast Skeletal Regulatory Activator in such country, is readying for the launch of or launched Tirasemtiv or a Fast Skeletal Regulatory Activator, or is promoting one (1) or more other product(s), either under this Agreement or otherwise, or has in place the requisite capabilities to market, sell, and distribute Tirasemtiv or a Fast Skeletal Regulatory Activator in any Indication or a Collaboration Product for [*] Indication. In the event that [*], in accordance with [*] set forth in Section [*].

ARTICLE 10
MEDICAL AFFAIRS ACTIVITIES

10.1 General. Subject to Cytokinetics' right to field medical science liaisons ("**MSLs**") for one or more Collaboration Product(s) in the Co-Promotion Territory or Shared Territory, as applicable, and other terms and conditions of this Article 10, Astellas shall have the primary responsibility, at its own expense, for all aspects of the Medical Affairs Activities of the Collaboration Products in the Collaboration Indications throughout the world, and the Parties shall have the rights and obligations for Medical Affairs Activities for the Collaboration Products in [*] Indications, all subject to Section 10.5(b), provided, however, that if any Law is to the contrary to a Medical Affairs Activities, the Parties will discuss in good faith to reasonably fit such Medical Affairs Activities to such Law.

10.2 Diligence. During [*] and thereafter, Astellas shall use Diligent Efforts to perform Medical Affairs Activities for each Collaboration Product [*] and to the extent appropriate [*].

10.3 Medical Affairs Plan. The Parties shall coordinate with respect to the strategy and implementation of the Medical Affairs Activities with respect to each Collaboration Product in each Indication [*] for such Indication, and such coordination will be set forth in the Medical Affairs Plan. No later than [*] Collaboration Product, Astellas shall prepare and provide to the JMAC for review and discussion a written plan for the Medical Affairs Activities for such Collaboration Product (the "**Medical Affairs Plan**"), subject to Section 10.5 below. The Medical Affairs Plan shall include a reasonably detailed description of and anticipated timeline

for the Parties', their respective Affiliates' and sublicensees' Medical Affairs Activities with respect to such Collaboration Product. The Medical Affairs Plan shall also include a reasonably detailed description of and anticipated timeline for Cytokinetics' MSLs' activities during [*] such Collaboration Product (and thereafter if Cytokinetics exercises its Co-Promotion option for such Collaboration Product or if such Collaboration Product is Developed in [*] Indication), as well as a budget therefor, which shall be consistent with Section 10.5 below. Astellas shall periodically (at least on an annual basis) prepare updates and amendments to the Medical Affairs Plan to reflect changes in its plans, subject to Section 10.5. Astellas shall submit all updates and amendments to the Medical Affairs Plan to the JMAC for review and discussion. Astellas shall be solely responsible for all costs incurred by or on behalf of either Party in performing their respective obligations under the Medical Affairs Plan and shall pay [*] as set forth in the Medical Affairs Plan, except as set forth in Section 10.5(b)(ii)(1). For clarity, [*] Medical Affairs Activities [*] each Indication will be determined by the JMAC, subject to [*]. If and when [*] MSL support for the [*] Indications [*] for the [*] Indications and/or [*] Indications. Cytokinetics may perform additional activities within the scope of its responsibilities under the Medical Affairs Plan, in addition to those funded in the JMAC-approved budget, [*] for the [*] Indication and/or [*] Indications in the Shared Territory.

10.4 Reports. Astellas (and Cytokinetics, if it exercises the right to field its own MSLs in the Co-Promotion Territory or Shared Territory pursuant to Section 10.5) shall update the JMAC at each regularly scheduled JMAC meeting regarding its Medical Affairs Activities of the Collaboration Products. Each such update shall be in a form to be agreed by the JMAC and shall summarize its, its Affiliates' and its sublicensees' significant Medical Affairs Activities with respect to the Collaboration Products throughout the world. The update by a Party will be at a level of detail reasonably requested by the other Party and sufficient to enable such Party to determine the other Party's compliance with its diligence obligations pursuant to Section 10.2.

10.5 Medical Scientific Liaisons.

(a) Licensed Indications and [*] **Indications.** At (i) any time after [*] Indication or [*] Indication, or (ii) any time in connection with [*] Indication or any [*] Indication, Cytokinetics shall have the right to field its own MSLs in the Co-Promotion Territory (for Licensed Indications) or Shared Territory (for [*] Indications and [*] Indications), in connection with such Pivotal Registration Study. The percentage of total MSL deployment by Cytokinetics shall be agreed upon by the Parties, but in any event shall be no less than [*] and no more than [*]. If Cytokinetics exercises the Cytokinetics Co-Funding Option, the portion of the Medical Affairs Plan specific to such Collaboration Product for the [*] Indication(s) and any amendment thereto [*], and Cytokinetics may prepare [*]. If Cytokinetics exercises the option to Co-Promote pursuant to Section 9.6 in any geographic region (i.e., Canada, the US, and EU plus Switzerland), Cytokinetics shall have the right to field MSLs [*] unless the Parties otherwise agree. Such MSLs of Cytokinetics shall perform certain Medical Affairs Activities allocated to them under the Medical Affairs Plan. Astellas shall reimburse the costs and expenses incurred by Cytokinetics in fielding the MSLs, which shall be calculated at a rate equal to [*].

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(b)[*] **Indications.** For all [*] Indications:

(i) [*] a Collaboration Product in such Indication:

(1) The terms of Section 10.5(a) shall also apply to such Indication in the Shared Territory.

(2) The portion of the Medical Affairs Plan specific to such Collaboration Product for such Indication and any amendment thereto [*], and Cytokinetics may [*].

(3) Astellas will lead the conduct of and be responsible for the strategy for all Medical Affairs Activities with respect to such Collaboration Product in such Indication, except Cytokinetics will [*] for all Medical Affairs Activities which are specific to such Indication in the Shared Territory [*] Medical Affairs Activities with respect to such Collaboration Product [*].

(ii) [*] a Collaboration Product in any [*] Indication, thereafter:

(1) [*] the conduct of, and shall [*] Medical Affairs Activities for Collaboration Product in such Indication [*]; and

(2) [*] shall have the right, but not the obligation, [*], and shall have [*] Medical Affairs Activities for Collaboration Product in such Indication [*].

ARTICLE 11
FINANCIAL PROVISIONS

11.1 Upfront Payment. This Agreement is a replacement to the Existing Agreement. As such, there is no upfront payment obligation from either Party to the other Party.

11.2 Reimbursement of Research Plan Costs. Astellas shall reimburse Cytokinetics' Research Plan Costs as follows:

(a) Advance Payment. Within [*] days of the Effective Date, Astellas shall pay to Cytokinetics an amount equal to Cytokinetics' estimated Research Plan Costs (as set forth in the initial Research Budget) for the then-current calendar quarter. Thereafter, during the Research Term, Cytokinetics shall submit to Astellas an invoice setting forth Cytokinetics' estimated Research Plan Costs based on the then-current Research Budget for the current calendar quarter, no later than [*] Business Days following the first day of such calendar quarter (the "**Research Advance Invoice**").

(b) True-Up. Within [*] days after the end of each calendar quarter during the Research Term, Cytokinetics shall submit to Astellas a reasonably detailed reconciliation report setting forth the actual Research Plan Costs incurred by or on account of Cytokinetics in

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such prior calendar quarter and any credits or deficits from the corresponding Research Advance Invoice previously provided for such quarter (the "**Research True-Up Report**"). If the estimated Research Plan Costs paid by Astellas pursuant to Section 11.2(a) above for such prior calendar quarter is less than Cytokinetics' actual Research Plan Costs for such quarter, subject to Section 5.6, Astellas shall pay the deficit to Cytokinetics as described in this Section 11.2(b). If the estimated Research Plan Costs paid by Astellas pursuant to Section 11.2(a) above for such prior calendar quarter is more than Cytokinetics' actual Research Plan Costs for such quarter, the excess shall be credited towards the Research Advance Invoice for the current calendar quarter (except where such invoice is the final such invoice to be provided by Cytokinetics, in which case the excess shall be refunded by Cytokinetics to Astellas within [*] days after the delivery of such invoice).

(c) Timing of Payment. For ease of administration, Astellas shall pay Cytokinetics a single payment reflecting the amount due under the Research Advance Invoice for the current calendar quarter plus any deficits (or less any credits) reflected in the Research True-Up Report for the prior calendar quarter within the later of (i) [*] days of Astellas' receipt of such Research Advance Invoice, or (ii) [*] days of Astellas' receipt of such Research True-Up Report.

11.3 Reimbursements and Sharing of Development Costs.

(a)Reimbursement. Astellas shall reimburse Cytokinetics' Development Costs as follows:

(i) Advance Payment. For each calendar quarter in which Cytokinetics is anticipated to conduct Development activities under the Development Plan (other than [*] Development), Cytokinetics shall submit to Astellas an invoice setting forth Cytokinetics' estimated Development Costs based on the then-current Cytokinetics Development Budget for the current calendar quarter, no later than [*] Business Days following the first day of such calendar quarter (the "**Development Advance Invoice**").

(ii) True-Up. Within [*] days after the end of each calendar quarter in which Cytokinetics has conducted Development activities under the Development Plan (other than [*] Development), Cytokinetics shall submit to Astellas a reasonably detailed reconciliation report setting forth the actual Development Costs incurred by or on account of Cytokinetics in such prior calendar quarter and any credits or deficits from the corresponding Development Advance Invoice previously provided for such quarter (the "**Development True-Up Report**"). If the estimated Development Costs paid by Astellas pursuant to Section 11.3(a)(i) above for such prior calendar quarter is less than Cytokinetics' actual Development Costs for such quarter, then Astellas shall pay the deficit to Cytokinetics as described in this Section 11.3(a)(ii) to the extent such amounts do not exceed the applicable then-current [*] Budget as approved by the JDC by more than [*]. If the estimated Development Costs paid by Astellas pursuant to Section 11.3(a)(i) above for such prior calendar quarter is more than Cytokinetics' actual Development Costs for such quarter, the excess shall be credited toward the Development Advance Invoice for the current calendar quarter (except where such invoice is the final such invoice to be provided by Cytokinetics, in which case the excess shall be refunded by Cytokinetics to Astellas within [*] days after the delivery of such invoice).

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

(iii) Timing of Payment. For ease of administration, Astellas shall pay Cytokinetics a single payment reflecting the amount due under the Development Advance Invoice for the current calendar quarter plus any deficits (or less any credits) reflected in the Development True-Up Report for the prior calendar quarter within the later of (1) [*] days of Astellas' receipt of such Development Advance Invoice, or (2) [*] of Astellas' receipt of such Development True-Up Report.

(b) Sharing of [*] **Costs.**

(i) If Cytokinetics has exercised the Cytokinetics Co-Funding Option, [*] for [*] Activator in [*] Indications, then within [*] days after the end of each calendar quarter during which Astellas has incurred any [*] Costs for such [*] Activator in [*] Indications (including such costs incurred by Cytokinetics and reimbursed by Astellas under Section 11.3(a)), Astellas shall submit to Cytokinetics a reasonably detailed accounting for, and an invoice for [*] Costs incurred during such calendar quarter. Subject to subsection (ii) below, Cytokinetics shall pay to Astellas the amount invoiced within [*] days after the receipt of the invoice, to the extent such amounts do not exceed the applicable then-current [*] Budget as approved by the JDC by more than [*].

(ii) [*] subject to the following [*]: (1) [*] for its share of [*]; (2) Cytokinetics [*] at any given time; and (3) Cytokinetics [*] by more than [*]. [*] is not intended to be [*] to continue to fulfill its obligations [*] (e.g., due to any modifications and/or additions to [*]. If Cytokinetics [*] any of the [*] shall be deemed [*].

(c) Sharing of [*] **Development Costs.** For all [*] Indications for which [*] Activator in such Indication, then [*] Costs for such Indication as follows:

(i) Advance Payment. For each calendar quarter in which [*] Development Work for such [*] Activator in such Indication under the Development Plan, [*] shall submit to [*] an invoice setting forth [*] Costs for such [*] Activator in such Indication based on the then-current [*] Budget for the current calendar quarter, no later than [*] Business Days following the first day of such calendar quarter (the "[*] **Advance Invoice**").

(ii) True-Up. Within [*] days after the end of each calendar quarter in which [*] Development Work for such [*] Activator in such Indication under the Development Plan, [*] shall submit to [*] a reasonably detailed reconciliation report setting forth the accounting for, and an invoice for [*] Development Costs for such [*] Activator in such Indication incurred by or on account of [*] in such prior calendar quarter and any credits or deficits from the corresponding [*] Advance Invoice previously provided for such quarter (the "[*] **True-Up Report**"). If the estimated [*] Development Costs paid by [*] pursuant to Section 11.3(c)(i) above for such prior calendar quarter is less than [*] Development Costs for such quarter, then [*] shall pay the deficit to [*] as described in this Section 11.3(c)(ii) to the extent such amounts do not exceed the applicable then-current [*] Development Budget as approved by the JDC by more than [*] . If the estimated [*] Development Costs paid by [*] pursuant to Section 11.3(c)(i) above for such prior calendar quarter is more than [*]

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Development Costs for such quarter, the excess shall be credited toward the [*] Advance Invoice for the current calendar quarter (except where such invoice is the final such invoice to be provided by [*] in which case the excess shall be refunded by [*] days after the delivery of such invoice).

(iii) Timing of Payment. For ease of administration, [*] shall pay [*] a single payment reflecting the amount due under the [*] Advance Invoice for the current calendar quarter plus any deficits (or less any credits) reflected in the [*] True-Up Report for the prior calendar quarter within the later of (1) [*] days of [*] receipt of such [*] Advance Invoice, or (2) [*] days of [*] receipt of such [*] True-Up Report.

11.4 Reimbursement of [*] **Development Costs**. Astellas shall, within [*] days after the receipt of [*] Indication pursuant to Section [*], pay to Cytokinetics an amount equal to [*] Development Costs, which shall be reported to the JDC pursuant to Section [*].

11.5 Research and Development Milestone Payments.

(a) Research Milestones. Astellas shall pay to Cytokinetics the non-refundable, non-creditable payment set forth in the table below upon [*] achievement of each milestone event for each Compound in accordance with Section 11.5(d):

Milestone Event	**Milestone Payment**
For each Other Skeletal Sarcomere Activator, [*]	$1,000,000

(b) Development Milestones. Subject to Section 11.5(c), Astellas shall pay to Cytokinetics the non-refundable, non-creditable payment set forth in the table below upon [*] achievement of each milestone event (whether by or on behalf of Astellas or its Affiliates or sublicensees, or by or on behalf of Cytokinetics or its Affiliates) in accordance with Section 11.5(d):

Milestone Event	**Milestone Payment**	
	[*] **Activator**	
	For each Collaboration Product containing a [*] Activator	For each Collaboration Product containing a [*] Activator
[*]	[*]	[*]
[*]	[*]	[*]
[*]	[*]	[*]

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

[*]	[*]	[*]
[*]	[*]	[*]
[*]	[*]	[*]
[*]	[*]	[*]
[*]	[*]	[*]
[*]	[*]	[*]
Total	$35,000,000	$25,000,000

Milestone events marked as *1 shall be referred to as **"Earlier Milestone Events"** and milestone events marked as *2 shall be referred to as **"Later Milestone Events"**.

(c) Interpretations of Section 11.5(b):

(i) In the event the Parties disagree as to whether [*] the Parties shall meet and discuss in good faith. In the event the Parties cannot agree on the matter [*] in accordance with [*] set forth in Section [*].

(ii) For determination of Astellas' payment obligations set forth in Section 11.5(b), it is confirmed that, if a particular milestone for the [*] for a particular Collaboration Product, then [*] such Collaboration Product [*] such milestone. For clarity, [*] refers to the [*] the table above, e.g., [*]" being [*] to [*]. For clarity, with respect to each [*] Indication, if [*] for such Indication, then [*]shall have the [*] as set forth in Section [*] to [*] the milestone payments [*] for achieved milestones (i.e., [*]).

(iii) Notwithstanding the foregoing, the total milestone payments under Section 11.5(b) shall not exceed two hundred fifty million Dollars ($250,000,000) for all Collaboration Products, regardless of the number of Collaboration Products and countries for which milestone events are achieved, subject to Section 11.5(e).

(iv) The milestone payment obligation set forth in Section 11.5(b) shall be established on [*]. Accordingly, and subject to Section [*] described in Section [*] Collaboration Product [*] Collaboration Products [*].

(v) The milestone payments in Section 11.5(b) for [*] shall be applicable for [*].

(d) Notice and Payment. Each Party shall notify the other Party in writing within [*] days after the achievement of any milestone set forth in this Section 11.5 by such Party, its Affiliates or its sublicensees. Astellas shall pay to Cytokinetics the applicable milestone payments within [*] days after the receipt of such notice from Cytokinetics (for milestones achieved by Cytokinetics, its Affiliates or (sub)licensees) or achievement of such milestone by Astellas or its Affiliates or sublicensees.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

(e) [*] Indications. If the JDC [*] a Collaboration Product in a [*] Indication after [*] then Astellas shall pay to Cytokinetics:

(i) [*] set forth in the table in Section [*] upon the achievement of [*] for such Collaboration Product [*] such achievement is [*] achievement of such [*] the Collaboration Product, as well as [*] achievement of the same [*] Collaboration Product in [*] Indication; or

(ii) [*] set forth in the table in Section [*] upon the achievement of [*] for such Collaboration Product [*] achieved in [*] Indication for the Collaboration Product.

(iii) It is confirmed that:

(A) Astellas' milestone payment under Section [*] Indication shall [*] in Section [*] and Astellas' milestone payment for [*] Indication under Section [*] in Section [*]. Astellas' milestone payment under Section [*] in Section [*];

(B) the achievement of [*] the Collaboration Products in a [*] Indication shall not trigger Astellas' payment obligations for the [*] set forth in Section [*];

(C) upon [*] achievement of [*] the Collaboration Products in [*] Indication (irrespective of whether such achievement takes place before the achievement of [*] Collaboration Product in a [*] Indication), Astellas shall make to Cytokinetics the milestone payment for [*] achievement of [*] such Collaboration Product in [*] Indication; and

(D) achievement of [*] a Collaboration Product in a [*] Indication shall not be deemed to have achieved [*] and shall not trigger Astellas' payment obligations for [*].

11.6 Commercial Milestones.

(a) Commercial Milestones. Astellas shall, in accordance with Section 11.6(b), pay to Cytokinetics the one-time, non-refundable, non-creditable payments set forth in the table below when the aggregated annual (based on Astellas' fiscal year) worldwide Net Sales of all Collaboration Products first reach the values indicated below. For clarity, the milestone payments in this Section 11.6 shall [*] specified below is [*].

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

Annual worldwide Net Sales of all Collaboration Products	Milestone Payments
[*]	[*]
[*]	[*]
[*]	[*]
[*]	[*]

(b) Notice and Payment. Astellas shall notify Cytokinetics in writing within [*] days after the end of the calendar quarter during which the aggregated annual worldwide Net Sales of all Collaboration Products first reach the values set forth in Section 11.6(a) above, and shall pay to Cytokinetics the applicable milestone payments concurrent with such notice.

11.7 Royalty Payments for Products.

(a) Royalty Rates. Subject to the other terms of this Section 11.7, during the Royalty Term, Astellas shall make quarterly non-refundable, non-creditable royalty payments to Cytokinetics on the Net Sales of each Collaboration Product at the applicable royalty rate set forth below. Net Sales shall be aggregated on a Compound-by-Compound basis across all Indications.

(i) Other Skeletal Sarcomere Activator Approved for [*] **Indication(s) and/or** [*] **Indications Only.** The royalty rates set forth in the table below shall apply to each Collaboration Product containing an Other Skeletal Sarcomere Activator, unless and until any of the royalty rates set forth in Sections 11.7(a)(ii), (iii) and (iv) below become applicable to such Collaboration Product. Once any of the royalty rates set forth in Sections 11.7(a)(ii), (iii) and (iv) below become applicable to such Collaboration Product, the royalty rates set forth in this Section 11.7(a)(i) shall no longer apply.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

Worldwide Net Sales of each Collaboration Product in an Astellas' fiscal year	Royalty Rate for Net Sales of Collaboration Product containing Other Skeletal Sarcomere Activator in such Astellas' fiscal year
[*]	[*]
[*]	[*]
[*]	[*]
[*]	[*]

(ii) Other Skeletal Sarcomere Activator Approved for [*] **Indication(s)** [*] **Indications).** The royalty rates set forth in the table below shall apply to Collaboration Product containing an Other Skeletal Sarcomere Activator after the first Marketing Approval of such Collaboration Product in [*] Indication for which Cytokinetics exercises the Cytokinetics Co-Funding Option [*] for such Collaboration Product and [*] such Collaboration Product for [*] Indication.

Worldwide Net Sales of each Collaboration Product in an Astellas' fiscal year	Royalty Rate for Net Sales in such Astellas' fiscal year
[*]	[*]
[*]	[*]
[*]	[*]
[*]	[*]

(iii) Other Skeletal Sarcomere Activator Approved for [*] **Indication(s) and** [*] **Indication(s)/** [*] **Indication(s).** The royalty rates set forth in the table below shall apply to Collaboration Product containing an Other Skeletal Sarcomere Activator after the first Marketing Approval of such Collaboration Product for[*] Indication (except during the Cytokinetics Commercialization Period) and provided that such Collaboration Product has obtained Marketing Approval for a [*] Indication or [*] Indication, provided that: (A) where such Collaboration Product is approved for [*] Indication, if Cytokinetics either did not exercise the Cytokinetics Co-Funding Option [*] for such Collaboration Product, then Astellas shall have the right to [*] as set forth in Section [*]; (B) if [*] for such Collaboration Product for such approved [*] Indication(s), then Cytokinetics shall have the right to [*] as set forth in Section [*]; and (C) if both the [*] apply, then Section [*] shall apply.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

Worldwide Net Sales of each Collaboration Product in an Astellas' fiscal year	Royalty Rate for Net Sales in such Astellas' fiscal year
[*]	[*]
[*]	[*]
[*]	[*]
[*]	[*]

(iv) Other Skeletal Sarcomere Activator Approved for [*]**.** The royalty rates set forth in the table below shall apply to Collaboration Product containing an Other Skeletal Sarcomere Activator after the first Marketing Approval of such Collaboration Product for one or more [*] Indication(s) [*] such Collaboration Product obtains Marketing Approval in any [*] Indication or [*] Indication (except during the Cytokinetics Commercialization Period), provided that [*] for such Collaboration Product for any of such approved [*] Indication(s), then [*] shall have the right to [*] as set forth in Section [*].

Worldwide Net Sales of each Collaboration Product in an Astellas' fiscal year	Royalty Rate for Net Sales in such Astellas' fiscal year
[*]	[*]
[*]	[*]
[*]	[*]
[*]	[*]

(v) [*]**.**

(1) [*]**.** Under circumstances where [*] has the right to [*] as set forth in this Section 11.7, and subject to Section 11.7(a)(v)(3) below, the [*] set forth in this Section 11.7 or Section 11.8(b) shall [*] shall no longer apply.

(2) [*]**.** Under circumstances where [*] has the right to [*] as set forth in this Section 11.7 or Section 11.8(b), and subject to Section 11.7(a)(v)(3) below, the [*] shall be [*]shall no longer apply.

(3) If, for a particular Collaboration Product, [*] under Section 11.7(a)(iii), then each Party shall [*] of the applicable [*]shall have the right to [*] under Section 11.7(a)(iii) but only [*] shall have the right to [*] but only [*].

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

(4) "[*]" means, with respect to a Collaboration Product [*] Indication(s) for which [*] for such [*] Indication. If [*] for such Collaboration Product and [*] for such Collaboration Product, then the [*] for such Collaboration Product [*] was deemed to have [*] for such Collaboration Product pursuant to Section [*] such Collaboration Product and [*] will be included in [*].

(5) "[*]" means, with respect to a Collaboration Product which [*] one or more [*] Indication(s), the [*] Indication(s)). If [*] Indication [*]such Collaboration Product [*].

(b) **Royalty Term**. Astellas' royalty payment obligations under this Agreement shall commence upon the First Commercial Sale of the first Collaboration Product anywhere in the world by Astellas, its Affiliates or its sublicensees, and shall continue, on a Collaboration Product-by-Collaboration Product and country-by-country basis, until the latest of (i) the expiration of the last to expire Valid Claim [*] such Collaboration Product in such country; (ii) the expiration of the last to expire Valid Claim [*] Collaboration Product, provided that this [*] with respect to such Collaboration Product [*]; (iii) the expiration of any Regulatory Exclusivity granted with respect to such Collaboration Product in such country; and (iv) [*]years after the First Commercial Sale of such Collaboration Product in such country (the "**Royalty Term**").

(c) [*]**.**

(i) If a Collaboration Product is[*] in a country during the applicable Royalty Term at a time when [*] with respect to such Collaboration Product [*] in such country, and (i) such [*] or (ii) such [*] for such Collaboration Product in such country[*] in such country, then the [*] of such Collaboration Product in such country [*] so long as the [*] with respect to such Collaboration Product [*] in such country [*].

(ii) If, for a particular Collaboration Product in a particular country, [*] the First Commercial Sale of such Collaboration Product in such country: (A) there is [*] such Collaboration Product [*]; and (B) the Royalty Term set forth in Section 11.7(b) [*] such Collaboration Product [*] such Collaboration Product [*] such Collaboration Product [*] so long as the[*] in this Section 11.7(c)(ii) [*]. This Section 11.7(c)(ii) shall not operate to [*] in Section [*].

(d) **Basis for Royalty**. This Section 11.7 is intended to provide for payments to Cytokinetics equal to the percentages of Net Sales set forth in this Section 11.7 for the duration of the Royalty Term. In establishing this payment structure, the Parties recognize, and Astellas acknowledges, the substantial value of the various actions and investments undertaken by Cytokinetics prior to the Effective Date and that Cytokinetics will undertake under this Agreement, and that the value of the Cytokinetics Technology licensed to Astellas hereunder resides substantially in Cytokinetics Know-How. As a result, the Parties attribute such value to Cytokinetics' leading proprietary knowledge in the subject matter, including trade secrets,

preclinical and clinical data pertaining to the Compounds and Collaboration Products, and regulatory filings made by Cytokinetics prior to the Effective Date, in each case created or generated by Cytokinetics through the expenditure of significant resources and as a result of Cytokinetics' unique innovative capabilities. The Parties agree that because Cytokinetics is not separately compensated under this Agreement for such additional benefits, the royalties set forth above are appropriate for the duration of the Royalty Term. The Parties have agreed to the payment structure set forth herein as a convenient and fair mechanism for both Parties in order to compensate Cytokinetics for these additional benefits as part of the overall consideration for Cytokinetics to enter into this Agreement.

(e) Royalty Reports and Payment. Within [*] days after each calendar quarter, commencing with the calendar quarter during which the First Commercial Sale of the first Collaboration Product is made anywhere in the world, Astellas shall provide Cytokinetics with a report that contains the following information for the applicable calendar quarter, on a Collaboration Product-by-Collaboration Product and country-by-country basis: (i) the amount of gross sales of the Collaboration Products, (ii) an itemized calculation of Net Sales showing deductions provided for in the definition of "Net Sales", (iii) a calculation of the royalty payment due on such sales, including [*] in accordance with Section [*], and (iv) the exchange rate for such country. Within [*] days after each calendar quarter, Astellas shall pay in Dollars all royalties due to Cytokinetics with respect to Net Sales by Astellas, its Affiliates and their respective sublicensees for such calendar quarter.

11.8 Payments during Cytokinetics Commercialization Period. If a Collaboration Product [*] Indication(s) and [*] for a Collaboration Product in such Indication(s), then, during the Cytokinetics Commercialization Period:

(a) Shared Territory.

(i) If Cytokinetics is [*] such Collaboration Product in the Shared Territory, then [*] such Collaboration Product in the Shared Territory. Subject to agreement by the Parties regarding the [*] with respect to such Collaboration Product and [*], on a quarterly basis within [*] days after the end of each calendar quarter, [*] shall provide [*] with an itemized invoice for the [*] during such calendar quarter. [*] shall pay the amount of each such invoice within [*] days after its receipt.

(ii) If Astellas [*] of such Collaboration Product in the Shared Territory, then Astellas shall pay to Cytokinetics [*] for such Collaboration Product in the Shared Territory, which payment shall be made within [*] days after each calendar quarter and accompanied with a reasonably detailed report. Subject to agreement by the Parties regarding the [*], Astellas shall have the right to [*] during such calendar quarter. Concurrent with such payment, Astellas shall provide Cytokinetics with a report equivalent to the royalty report set forth in Section 11.7(e) and an itemized accounting for the [*].

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

(iii) "**Astellas** [*]" means, to the extent applicable and [*] in accordance with the scope of [*] agreed by the Parties: (A) [*]; (B) any related [*]; and (C) [*] to be agreed by the Parties (which will not [*]) to cover related costs incurred by Astellas. For the convenience of the Parties, the Parties may agree on [*] Cytokinetics under Section [*] with respect to [*] Collaboration Product, Cytokinetics will [*] such Collaboration Product pursuant to Section [*].

(iv) "[*]" means the [*] (A) [*] the Collaboration Product; (B) [*]; (C) [*]; and (D) a reasonable [*] Collaboration Product [*]; in each case, only to the extent [*] mutually agreed [*]. [*] shall exclude any [*] Cytokinetics.

(v) If the Parties cannot reach agreement [*] each Party with [*] will meet in person and seek to resolve the matter prior to escalation to the JSC. If the matter is unresolved after escalation to the JSC, [*], in accordance with [*] set forth in Section [*].

(b) **Astellas Territory**. If Astellas Commercializes such Collaboration Product in such Indication in the Astellas Territory, then Astellas shall make payments to Cytokinetics as follows:

(i) **During the Cytokinetics Commercialization Period.** During the Cytokinetics Commercialization Period, Astellas shall make quarterly non-refundable, non-creditable royalty payments to Cytokinetics on the Net Sales of each Collaboration Product at the applicable royalty rate set forth below. Net Sales shall be aggregated on a Compound-by-Compound basis across all Indications.

Net Sales in Astellas Territory of each Collaboration Product in an Astellas' fiscal year	**Royalty Rate for Net Sales in such Astellas' fiscal year**
[*]	[*]
[*]	[*]
[*]	[*]
[*]	[*]

(ii) **After the Cytokinetics Commercialization Period.** After the Cytokinetics Commercialization Period, Astellas shall make quarterly non-refundable, non-creditable royalty payments to Cytokinetics on the Net Sales of each Collaboration Product at the royalty rates set forth in Section 11.7(a)(iii) (if Astellas has [*] Indication or [*] Indication for such Collaboration Product in the applicable country) or Section 11.7(a)(iv) (if Astellas has [*] Indication or [*] Indication for such Collaboration Product in the applicable country [*] Indication in such country for which [*]), but in each case [*] shall have the right to [*] as set forth in Section [*], provided that the [*].

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

11.9 Currency; Exchange Rate. All payments to be made by a Party to the other Party under this Agreement shall be made in Dollars by bank wire transfer in immediately available funds to a bank account designated by written notice from the Party that receives the payment. The rate of exchange to be used in computing the amount of currency equivalent in Dollars for calculating Net Sales shall be made at the average quarterly rate as published by Bloomberg (based on 20:00 Tokyo time) for the applicable quarterly reporting period for which the payment is due, or such other source as the Parties may agree in writing. Astellas shall provide Cytokinetics with written documentation of the applicable average quarterly rate, in English, along with the applicable royalty report under Section 11.7(e).

11.10 Late Payments. If a Party does not receive payment from the other Party of any sum due to it on or before the due date therefor, simple interest shall thereafter accrue on the sum due to such receiving Party from the due date until the date of payment at a [*] or the [*].

11.11 Taxes.

(a) Taxes on Income. Each Party shall be solely responsible for the payment of all taxes imposed on its share of income arising directly or indirectly from the activities of the Parties under this Agreement.

(b)Tax Cooperation. The Parties agree to cooperate with one another and use reasonable efforts to avoid or reduce tax withholding or similar obligations in respect of royalties, milestone payments, and other payments made by a Party to the other Party under this Agreement. To the extent such paying Party is required to deduct and withhold taxes on any payment to the other Party, such paying Party shall pay the amounts of such taxes to the proper Governmental Authority in a timely manner, and the sum payable to such other Party shall be increased to the extent necessary to ensure that such other Party receives a sum equal to the sum which it would have received had there been no such withholding tax. Notwithstanding the foregoing, if the paying Party is obliged to pay withholding taxes and the other Party reasonably foresees that it will be able to utilize as a tax credit any amounts withheld or deducted by such paying Party, such other Party shall immediately so notify and, upon such notice, with respect to the amount in question, such paying Party will be released from the obligation to increase the amount pursuant to this Section 11.11. Such other Party shall provide such paying Party any tax forms that may be reasonably necessary in order for such paying Party to not withhold tax or to withhold tax at a reduced rate under an applicable bilateral income tax treaty, to the extent legally able to do so. Such other Party shall use reasonable efforts to provide any such tax forms to such paying Party in advance of the due date. Each Party shall provide the other with reasonable assistance (i) to enable the recovery, as permitted by Law, of withholding taxes or similar obligations resulting from payments made under this Agreement and (ii) in connection with any audit by any tax authority relating to this Agreement. In the event the paying Party increased the amount of its payment to the other Party to account for any withholding tax, and such other Party later utilizes any such amount withheld by such paying Party to achieve any tax saving for the benefit of such other Party in the form of a tax deduction, such other Party shall notify such paying Party in writing of the amount of such tax saving and such paying Party shall have the right to credit such amount of tax saving against its future payment obligations to such other Party.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

11.12 Records and Audit Rights. Each Party shall maintain complete and accurate records in sufficient detail to permit the other Party to confirm the accuracy of the amount of Research Plan Costs, Development Costs, [*] to be reimbursed, achievement of sales milestones, royalty payments and other amounts payable under this Agreement. Upon reasonable prior notice, such records shall be open during regular business hours for a period of [*] years from the creation of individual records for examination by an independent certified public accountant selected by the auditing Party and reasonably acceptable to the audited Party for the sole purpose of verifying for the auditing Party the accuracy of the financial reports furnished by the audited Party pursuant to this Agreement or of any payments made, or required to be made, by or to the audited Party pursuant to this Agreement. Such audits shall not occur more often than once each calendar year. Such auditor shall not disclose the audited Party's Confidential Information to the auditing Party, except to the extent such disclosure is necessary to verify the accuracy of the financial reports furnished by the audited Party or the amount of payments to or by the audited Party under this Agreement. Any amounts shown to be owed but unpaid shall be paid within [*] days after the accountant's report, plus interest (as set forth in Section 11.10) from the original due date. The auditing Party shall bear the full costs of such audit unless such audit reveals an overpayment to, or an underpayment by, the audited Party that resulted from a discrepancy in the financial report provided by the audited Party for the audited period, which underpayment or overpayment was more than [*] of the amount set forth in such report, in which case the audited Party shall reimburse the auditing Party for the costs for such audit. If any such overpayment exceeds such [*] amount, then the auditing Party will refund such amount to the audited Party within [*] days after the accountant's report. On the other hand, if any such overpayment does not exceed such [*] amount, the auditing Party shall have the right to credit the amount of such overpayment against its future payment obligations to the audited Party, provided that such future payments are expected.

ARTICLE 12
INTELLECTUAL PROPERTY RIGHTS

12.1 Ownership of Collaboration Intellectual Property.

(a) All Collaboration Intellectual Property shall be [*]. Each Party shall [*] in any Collaboration Intellectual Property [*], the other Party, subject to [*]. To the extent any Collaboration Intellectual Property is [*] a Party, such Party shall, [*] such Collaboration Intellectual Property to the extent [*] the other Party [*]. To the extent any Patent Right [*] any Collaboration Intellectual Property [*]such Patent Right to [*].

(b) The Parties shall cooperate with respect to the filing, prosecution, maintenance and enforcement of Collaboration Patents through the JPC. This Agreement shall be deemed a joint research agreement under 35 U.S.C. §102(c) or §103(c), as applicable, and any foreign counterparts entered into for the purpose of researching, identifying and developing Compounds and Collaboration Products under the terms set forth herein.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

12.2 Disclosure of Collaboration Intellectual Property. Each Party shall promptly disclose to the other Party all Collaboration Intellectual Property, including all invention disclosures or other similar documents submitted to such Party by its, or its Affiliates', directors, officers, employees, agents or independent contractors relating to such Collaboration Intellectual Property, and shall also respond promptly to reasonable requests from the other Party for additional information relating to such Collaboration Intellectual Property. Notwithstanding the foregoing, the Parties may [*] in connection with the Research Plan.

12.3 Patent Prosecution.

(a) Cytokinetics Sole Patents.

(i) Cytokinetics shall be responsible for filing, prosecuting and maintaining the Cytokinetics Patents, [*]. Cytokinetics shall consult with Astellas and keep Astellas reasonably informed of the status of the Cytokinetics Patents and shall promptly provide Astellas with copies of material correspondence received from any patent authorities in connection therewith. In addition, Cytokinetics shall promptly provide Astellas with drafts of all proposed material filings and correspondences to any patent authorities with respect to the Cytokinetics Patents for Astellas' review and comment prior to the submission of such proposed filings and correspondences. Cytokinetics shall confer with Astellas and reasonably consider Astellas' comments prior to submitting such filings and correspondences, provided that Astellas shall provide such comments within [*] days of receiving the draft filings and correspondences from Cytokinetics. If Astellas does not provide comments within such period of time, then Astellas shall be deemed to have no comment to such proposed filings or correspondences. In case of disagreement between the Parties with respect to the filing, prosecution and maintenance of such Cytokinetics Patents, the final decision shall be made by Cytokinetics, subject to subsection (ii) below. For the purpose of this Article 12, "prosecution" shall include any post-grant proceeding including supplemental examination, post-grant review proceeding, inter parties review proceeding, patent interference proceeding, opposition proceeding, reexamination, patent term restoration (under but not limited to the U.S. Drug Price Competition and Patent Term Restoration Act), supplemental protection certificates or their equivalents, and patent term extensions.

(ii) Cytokinetics shall notify Astellas in writing of any decision to cease prosecution and/or maintenance of, any Cytokinetics Patents in any country. Cytokinetics shall provide such notice at least [*] days prior to any filing or payment due date, or any other due date that requires action in order to avoid loss of rights, in connection with such Cytokinetics Patent. Upon request by Astellas, Cytokinetics shall permit Astellas, at Astellas' discretion and expense, to continue prosecution or maintenance of such Cytokinetics Patent in such country, and for as long as Astellas assumes such prosecution and maintenance at its own costs, such Cytokinetics Patent shall be[*].

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

(b) Collaboration Patents.

(i) Astellas shall be responsible for filing, prosecuting and maintaining any Collaboration Patents, [*]. Astellas shall consult with Cytokinetics and keep Cytokinetics reasonably informed of the status of the Collaboration Patents and shall promptly provide Cytokinetics with copies of material correspondence received from any patent authorities in connection therewith. In addition, Astellas shall promptly provide Cytokinetics with drafts of all proposed material filings and correspondences to any patent authorities with respect to the Collaboration Patents for Cytokinetics' review and comment prior to the submission of such proposed filings and correspondences. Astellas shall confer with Cytokinetics and reasonably consider Cytokinetics' comments prior to submitting such filings and correspondences, provided that Cytokinetics shall provide such comments within [*] days of receiving the draft filings and correspondences from Astellas. If Cytokinetics does not provide comments within such period of time, then Cytokinetics shall be deemed to have no comment to such proposed filings or correspondences. In case of disagreement between the Parties with respect to the filing, prosecution and maintenance of such Collaboration Patents, the final decision shall be made by Astellas, subject to subsection (ii) below.

(ii) Astellas shall notify Cytokinetics in writing of any decision to cease prosecution and/or maintenance of, any Collaboration Patents in any country. Astellas shall provide such notice at least [*] days prior to any filing or payment due date, or any other due date that requires action in order to avoid loss of rights, in connection with such Collaboration Patent. In such event, Astellas shall permit Cytokinetics, at its discretion and expense, to continue prosecution or maintenance of such Collaboration Patent in such country, and for as long as Cytokinetics assumes such prosecution and maintenance at its own costs, such Collaboration Patent shall be [*].

(c) Astellas Patents.

(i) Astellas shall be responsible for filing, prosecuting and maintaining the Astellas Patents, [*]. Astellas shall keep Cytokinetics reasonably informed of the status of the Astellas Patents.

(ii) Astellas shall notify Cytokinetics in writing of any decision to cease prosecution and/or maintenance of, any Astellas Patents in any country. Astellas shall provide such notice at least [*] to avoid loss of rights, in connection with such Astellas Patent. In such event, Astellas shall permit Cytokinetics, at its discretion and expense, to continue prosecution or maintenance of such Astellas Patent in such country and, after such notice by Astellas, such Astellas Patent shall be [*].

(d) Collaboration. When a Party assumes the responsibilities for the prosecution and maintenance of a Patent under Section 12.3(a)(ii), 12.3(b)(ii), 12.3(c)(ii) or 14.3(b), the other Party shall promptly transfer to such Party the patent prosecution files for such Patent and provide reasonable assistance in the transfer of the prosecution responsibilities. The

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Party assuming such prosecution and maintenance responsibilities shall have the right to engage its own counsel to do so.

12.4 Patent Enforcement.

(a) Each Party shall notify the other within [*] Business Days of becoming aware of any alleged or threatened infringement by a Third Party of any of the Cytokinetics Patents, Astellas Patents or Collaboration Patents, which infringement adversely affects or is expected to adversely affect the Development or Commercialization of any Collaboration Product, including any "patent certification" filed in the United States under 21 U.S.C. §355(b)(2) or 21 U.S.C. §355(j)(2) or similar provisions in other jurisdictions and of any declaratory judgment, opposition, or similar action alleging the invalidity, unenforceability or non-infringement of any of the Cytokinetics Patents, Astellas Patents or Collaboration Patents (collectively "**Product Infringement**").

(b) Astellas shall have the first right to bring and control any legal action in connection with any Product Infringement at its own expense as it reasonably determines appropriate, and Cytokinetics shall have the right to be represented in any such action by counsel of its choice. Astellas shall provide Cytokinetics and its counsel with copies all court filings and material supporting documentation, and, at the request of Cytokinetics, reasonable access to Astellas' counsel for consultation, provided that, unless Cytokinetics is joined as a party to such action, any counsel retained by Cytokinetics shall not act as attorney of record for any such action, or conduct any legal proceedings as part of such action, unless specifically requested by Astellas and at Astellas' expense. If Astellas decides not to bring such legal action, it shall so notify Cytokinetics promptly in writing and Cytokinetics shall have the right to bring and control any legal action in connection with such Product Infringement at its own expense as it reasonably determines appropriate after consultation with Astellas.

(c) Cytokinetics shall have the exclusive right to enforce the Cytokinetics Patents for any infringement that is not a Product Infringement at its own expense as it reasonably determines appropriate. Astellas shall have the exclusive right to enforce the Astellas Patents for any infringement that is not a Product Infringement at its own expense as it reasonably determines appropriate. Each Party shall have the right to enforce the Collaboration Patents for any infringement that is not a Product Infringement at its own expense as it reasonably determines appropriate.

(d) At the request of the Party bringing the action, the other Party shall provide reasonable assistance in connection therewith, including by executing reasonably appropriate documents, cooperating in discovery and joining as a party to the action if required.

(e) In connection with any such proceeding, the Party bringing the action shall not enter into any settlement admitting the invalidity of, or otherwise impairing the other Party's rights in, the Cytokinetics Patents, Astellas Patents or Collaboration Patents without the prior written consent of the other Party.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

(f) Any recoveries resulting from enforcement action relating to a claim of Product Infringement shall be first applied against payment of each Party's costs and expenses in connection therewith. Any such recoveries in excess of such costs and expenses (the "**Remainder**") shall be [*], provided that if the Product Infringement involves a Collaboration Product in [*] Indication [*] in the Shared Territory, and [*] for such Indication, the Remainder shall be paid to[*]. Any Remainder [*] in accordance with Section [*].

12.5 Trademarks.

(a) Except as set forth in Section 12.5(b) below, Astellas shall have the right to brand the Collaboration Products using any trademarks and trade names it determines appropriate for the Collaboration Products, which may vary by country or within a country ("**Product Marks**"). Astellas shall own all rights in the Product Marks and shall register and maintain the Product Marks in the countries and regions that it determines reasonably necessary, at Astellas' cost and expense. If Cytokinetics exercises its Co-Promotion option for a Collaboration Product, Astellas shall mark such Collaboration Product in the Co-Promotion Territory (or Shared Territory, as applicable) with logos of both Astellas and Cytokinetics in equal prominence.

(b) If Cytokinetics is Commercializing a Collaboration Product in an [*] Indication during the Cytokinetics Commercialization Period, Cytokinetics shall have the right to brand such Collaboration Product in the Shared Territory using any trademarks and trade names it determines appropriate for the Collaboration Products, which may vary by country or within a country (the "**Cytokinetics Product Marks**"). Cytokinetics shall own all rights in the Cytokinetics Product Marks and shall register and maintain the Cytokinetics Product Marks in the countries and regions in the Shared Territory that it determines reasonably necessary, at Cytokinetics' cost and expense. After the Cytokinetics Commercialization Period, Astellas has the right to take over the Cytokinetics Product Marks (but not Cytokinetics' name or its corporate marks) from Cytokinetics in the countries and regions in the Shared Territory without any additional compensation to Cytokinetics, provided that Astellas shall bear any costs and expenses incurred in connection with such transfer.

ARTICLE 13
CONFIDENTIALITY; PUBLICATION

13.1 Duty of Confidence. Subject to the other provisions of this Article 13:

(a) all Confidential Information of a Party (the "**Disclosing Party**") shall be maintained in confidence and otherwise safeguarded by the other Party (the "**Receiving Party**") and its Affiliates, using Diligent Efforts, but in any event no less than in the same manner and with the same protections as the Receiving Party maintains its own confidential information;

(b) the Receiving Party may only use any such Confidential Information for the purposes of performing its obligations or exercising its rights under this Agreement; and

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

(c) the Receiving Party may disclose Confidential Information of the other Party to: (i) its Affiliates and sublicensees; and (ii) officers, employees, directors, agents, contractors, consultants and advisers of the Receiving Party and its Affiliates and sublicensees, in each case to the extent reasonably necessary for the purposes of, and for those matters undertaken pursuant to, this Agreement; provided that such Persons are bound by legally enforceable obligations to maintain the confidentiality of the Confidential Information in a manner consistent with the confidentiality provisions of this Agreement.

13.2 Exceptions. The foregoing obligations as to particular Confidential Information of a Disclosing Party shall not apply to the extent that the Receiving Party can demonstrate through competent evidence that such Confidential Information:

(a) is known by the Receiving Party at the time of its receipt without an obligation of confidentiality, and not through a prior disclosure by the Disclosing Party, as documented by the Receiving Party's business records;

(b) is in the public domain before its receipt from the Disclosing Party, or thereafter enters the public domain through no fault of the Receiving Party;

(c) is subsequently disclosed to the Receiving Party by a Third Party who may lawfully do so and is not under an obligation of confidentiality to the Disclosing Party; or

(d) is developed by the Receiving Party independently and without use of or reference to any Confidential Information received from the Disclosing Party, as documented by the Receiving Party's business records.

No combination of features or disclosures shall be deemed to fall within the foregoing exclusions merely because individual features are published or available to the general public or in the rightful possession of the Receiving Party, unless the combination itself and principle of operation are published or available to the general public or in the rightful possession of the Receiving Party.

13.3 Authorized Disclosures. Notwithstanding the obligations set forth in Sections 13.1 and 13.5, a Party may disclose the other Party's Confidential Information (including this Agreement and the terms herein) to the extent:

(a) such disclosure: (i) is reasonably necessary for the filing or prosecuting Patent Rights as contemplated by this Agreement; (ii) is reasonably necessary in connection with regulatory filings for Collaboration Products; (iii) is reasonably necessary for the prosecuting or defending litigation as contemplated by this Agreement; or (iv) is made to any Third Party bound by written obligation of confidentiality and non-use substantially consistent with to those set forth under this Article 13 (subject to subsection (b) below with respect to [*]), to the extent otherwise necessary or appropriate in connection with the exercise of its rights or the performance of its obligations hereunder;

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

(b) such disclosure is to [*], does not include the disclosure of Confidential Information relating to [*], and otherwise meets the requirements of subsection (a) above, in which case the Party [*] may agree with [*] of no less than [*] and in any event no less than [*]. Notwithstanding the foregoing, the [*] Party may request that the other Party grant a waiver to such requirement, which waiver shall not be unreasonably withheld or delayed and may be provided by e-mail. Each Party agrees to use Diligent Efforts to respond to a request for such a waiver within [*] Business Days;

(c)such disclosure is reasonably necessary: (i) to such Party's directors, attorneys, independent accountants or financial advisors for the sole purpose of enabling such directors, attorneys, independent accountants or financial advisors to provide advice to such Party (ii) to any vendor of such Party for the sole purpose to calculate any royalty payment obligations hereunder, provided that in each such case on the condition that such directors, attorneys, independent accountants, financial advisors and vendors are bound by confidentiality and non-use obligations substantially consistent with those contained in this Agreement; or (ii) to actual or potential investors, acquirors, (sub)licensees and other financial or commercial partners solely for the purpose of evaluating or carrying out an actual or potential investment, acquisition or collaboration; provided that in each such case on the condition that such Persons are bound by confidentiality and non-use obligations substantially consistent with those contained in the Agreement; or

(d) such disclosure is required by judicial or administrative process, provided that in such event such Party shall promptly notify the other Party in writing of such required disclosure and provide the other Party an opportunity to challenge or limit the disclosure obligations. Confidential Information that is disclosed by judicial or administrative process shall remain otherwise subject to the confidentiality and non-use provisions of this Article 13, and the Party disclosing Confidential Information pursuant to law or court order shall take all steps reasonably necessary, including seeking of confidential treatment or a protective order, to ensure the continued confidential treatment of such Confidential Information.

13.4 Publications. The JMAC (and prior to the establishment of the JMAC, the JRC (for Research-related publications) or the JDC (for Development-related publications)) (each of the JRC, JDC and the JMAC, the "**Responsible Committee**") shall establish publication review and approval procedures for this Collaboration consistent with the publication policies of both Parties. The Parties shall review and approve any publication by either Party or its Affiliates or (sub)licensees relating to the Compounds or Collaboration Products, including scientific, health economic or pharmacoeconomic publications, in accordance with such procedures, considering Astellas' and Cytokinetics' interest in publishing the results of the work in the Research, Development, and Medical Affairs Activities in order to obtain recognition within the scientific or other applicable community and to advance the state of knowledge in the field, the need to protect Confidential Information and the Parties' mutual interest in obtaining valid patent protection, protecting reasonable business interests and trade secret information, and having an integrated approach to developing one or more Collaboration Products for one or more Indications. Consequently, except for disclosures permitted pursuant to Sections 13.3 and 13.5,

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each Party and their Affiliates, employee(s) and consultant(s) shall deliver to the Responsible Committee for review and comment a copy of any proposed publication or presentation that pertains to any Compound or Collaboration Product, pursuant to a procedure to be established by the Responsible Committee (but excluding general corporate publications and presentations), any such comments to be provided within [*] days of receipt. The Responsible Committee shall have the right to require modifications of the publication or presentation: (a) to protect each Parties' respective Confidential Information; (b) for trade secret reasons or business reasons; and/or (c) to delay such submission for an additional [*] days as may be reasonably necessary to seek patent protection for the information disclosed in such proposed submission.

13.5 Publicity; Use of Names.

(a) A Party may issue a press release announcing the restatement of the Agreement after the Effective Date; provided that, such press release shall be reviewed and approved by the other Party before issuance, such approval not to be unreasonably withheld or delayed. No other disclosure of the existence or the terms of this Agreement may be made by either Party or its Affiliates except as provided in Section 13.3 and this Section 13.5. No Party shall use the name, trademark, trade name or logo of the other Party, its Affiliates or their respective employees in any publicity, promotion, news release or disclosure relating to this Agreement or its subject matter, except as provided in this Section 13.5 or with the prior express written permission of the other Party, except as may be required by applicable Law.

(b) A Party may disclose this Agreement in securities filings with the Securities Exchange Commission (the "**SEC**") or equivalent foreign agency to the extent required by applicable Law. In such event, the Party seeking such disclosure shall prepare a proposed redacted version of this Agreement to request confidential treatment for this Agreement, and the other Party agrees to promptly (and in any event, no less than [*] Business Days after receipt of such-proposed redactions) give its input in a reasonable manner in order to allow the Party seeking disclosure to file its request within the time lines prescribed by applicable Law. The Party seeking such disclosure shall reasonably consider any comments thereto provided by the other Party within such [*] Business Day period.

(c) Each Party acknowledges that the other Party may be legally required to make public disclosures (including in filings with the Governmental Authorities or by issuing a press release) of certain terms of or material developments or material information generated under this Agreement and agrees that each Party may make such disclosures as required by Law, provided that the Party seeking such disclosure first provides the other Party a copy of the proposed disclosure, and shall reasonably consider any comments thereto provided by the other Party within [*] days after the receipt of such proposed disclosure, provided that in no event shall the Party having such disclosure obligation be required to delay its disclosure in a manner that may cause such Party to violate any Law or incur any legal liability.

(d) Other than the press releases to be issued pursuant to Sections 13.5(a) and (c), the Parties agree that the portions of any other news release or other public announcement relating to this Agreement or the performance hereunder that would disclose information other

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

than that already in the public domain, shall first be reviewed and approved by both Parties (with such approval not to be unreasonably withheld or delayed); provided, however, that notwithstanding the foregoing, Cytokinetics shall have the right to disclose publicly (including on its website): (i) the fact that it has entered into this Agreement; (ii) the commencement, progress, status, completion and key results of each clinical trials conducted by the Parties under this Agreement; (iii) the receipt of any milestone payments under this Agreement; (iv) Marketing Approval of any Collaboration Product; (v) the First Commercial Sale of any Collaboration Product; and (vi) royalties received from Astellas. For each such disclosure, unless Cytokinetics otherwise has the right to make such disclosure under this Article 13, Cytokinetics shall provide Astellas with a draft of such disclosure at least [*] Business Days prior to its intended release for Astellas' review and comment, and shall consider Astellas' comments in good faith. If Cytokinetics does not receive comments from Astellas within [*] Business Days, Cytokinetics shall have the right to make such disclosure without further delay. The Parties shall use reasonable efforts to coordinate the timing of such disclosures to be outside the trading hours of the NASDAQ and Tokyo stock markets, provided that neither Party shall be required to so delay such a disclosure where such delay would reasonably be expected to give rise to liability for or sanctions upon such Party in such Party's sole judgment.

(e) The Parties agree that after a disclosure pursuant to Section 13.5(b), a press release (including the initial press release) or other public announcement pursuant to Section 13.5(c) has been reviewed and approved by the other Party, either Party may make subsequent public disclosures reiterating such information without having to obtain the other Party's prior consent or approval.

(f) Each Party agrees that the other Party shall have the right to use such first Party's name and logo in presentations, the company's website, collateral materials and corporate overviews to describe the collaboration relationship, as well as in taglines of press releases issued pursuant to this Section 13.5.

13.6 Attorney-Client Privilege. Neither Party is waiving, nor shall be deemed to have waived or diminished, any of its attorney work product protections, attorney-client privileges or similar protections and privileges or the like as a result of disclosing information pursuant to this Agreement, or any of its Confidential Information (including Confidential Information related to pending or threatened litigation) to the Receiving Party, regardless of whether the Disclosing Party has asserted, or is or may be entitled to assert, such privileges and protections. The Parties: (a) share a common legal and commercial interest in such disclosure that is subject to such privileges and protections; (b) are or may become joint defendants in proceedings to which the information covered by such protections and privileges relates; (c) intend that such privileges and protections remain intact should either Party become subject to any actual or threatened proceeding to which the Disclosing Party's Confidential Information covered by such protections and privileges relates; and (d) intend that after the Effective Date both the Receiving Party and the Disclosing Party shall have the right to assert such protections and privileges.

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ARTICLE 14
TERM AND TERMINATION

14.1 Term. The term of this Agreement shall commence upon the Effective Date and continue in full force and effect, on a Collaboration Product-by-Collaboration Product basis, until the expiration of the Royalty Term with respect to the applicable Collaboration Product, unless earlier terminated as set forth in Section 14.2 below (the "**Term**"). Upon expiration of the Royalty Term with respect to such Collaboration Product in such country, the license granted to Astellas under this Agreement with respect to such Collaboration Product in such country shall remain in effect on a perpetual, fully paid-up and royalty-free basis.

14.2 Termination.

(a) Termination by Astellas for Convenience. At any time after the Research Term, Astellas may terminate this Agreement for convenience in its entirety or on a [*] basis by providing written notice of termination to Cytokinetics, which notice includes an effective date of termination at least one hundred eighty (180) days after the date of the notice. [*]

(b) Termination for Material Breach. If either Party believes that the other is in material breach of its obligations hereunder or material breach of any representation or warranty set forth in this Agreement, then the non-breaching Party may deliver notice of such breach to the other Party. For all breaches other than a failure to make a payment as set forth in this Agreement, the allegedly breaching Party shall have [*] days from such notice to dispute or cure such breach. For any breach arising from a failure to make a payment set forth in this Agreement, the allegedly breaching Party shall have [*] days from the receipt of the notice to dispute or cure such breach. If the Party receiving notice of breach fails to cure, or fails to dispute, that breach within the applicable period set forth above, then the Party originally delivering the notice of breach may terminate this Agreement effective on written notice of termination to the other Party. If the allegedly breaching Party in good faith disputes such material breach or disputes the failure to cure or remedy such material breach and provides written notice of that dispute to the other Party within the applicable period set forth above, the matter shall be addressed under the dispute resolution provisions in Section 17.6(a), and the termination shall not become effective unless and until it has been determined under Section 17.6(a) that the allegedly breaching Party is in material breach of this Agreement. Notwithstanding the foregoing, if the material breach [*] and provided that such material breach [*] under this Section 14.2(b) shall be [*] set forth in Section [*] with respect to such [*] except as provided in Section [*].

(c) Termination for Patent Challenge. Except to the extent the following is unenforceable under the laws of a particular jurisdiction, Cytokinetics may terminate this Agreement if Astellas or its Affiliates or sublicensees, individually or in association with any other person or entity, commences a legal action challenging the validity, enforceability or scope of any Cytokinetics Patents.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

(d) Termination for Bankruptcy. Either Party may terminate this Agreement, if, at any time, the other Party files in any court or agency pursuant to any statute or regulation of any state, country or jurisdiction, a petition in bankruptcy or insolvency or for reorganization or for an arrangement or for the appointment of a receiver or trustee of such other Party or of its assets, or if the other Party proposes a written agreement of composition or extension of its debts, or if the other Party is served with an involuntary petition against it, filed in any insolvency proceeding, and such petition shall not be dismissed within [*] days after the filing thereof, or if the other Party proposes or is a party to any dissolution or liquidation, or if the other Party makes an assignment for the benefit of its creditors.

14.3 Effect of Termination. Upon the termination (but not expiration) of this Agreement for any reason, all licenses and other rights granted to Astellas under the Cytokinetics Technology and Collaboration Intellectual Property shall terminate. In the case of a partial termination under Section 14.2(a) or 14.2(b), such licenses and rights will terminate solely with respect to [*]. In addition, the following consequences shall apply in the event of termination by Astellas pursuant to Section 14.2(a) or by Cytokinetics pursuant to Section 14.2(b), 14.2(c) or 14.2(d):

(a) [*] **Products**. [*] (i) in the event this Agreement is terminated with respect to [*] Product, such [*] Product; and/or (ii) in the event this Agreement is terminated with respect to [*], such [*] Products containing such [*]), in each case in the Field [*] (such [*] and [*] Products, the "[*] **Products**"). [*] Products as follows:

(i) if on the effective date of such termination, the Parties have [*] for such [*] Product [*];

(ii) if on the effective date of such termination, the Parties have [*] for such [*] Product but have [*] for such [*] Product [*];

(iii) if on the effective date of such termination, the Parties have [*] for such [*] Product but have [*] for such [*] Product [*];

(iv) if on the effective date of such termination, the Parties have [*] for such [*] Product but have [*] for such [*] Product [*]; and

(v) if on the effective date of such termination, the Parties have [*] for such [*] Product and have [*] for such [*] Product [*].

In such event, Sections [*] shall apply to [*] (adjusted for [*]), and Section [*] shall no longer apply to the [*] Products. Cytokinetics may [*] by written notice to Astellas.

(b) Patent Prosecution and Enforcement. After the effective date of termination, Astellas shall promptly transfer to Cytokinetics, and Cytokinetics shall thereafter be solely responsible for, the prosecution and maintenance of Collaboration Patents that are [*] under Section [*]. Cytokinetics shall have the first right to enforce at Cytokinetics' sole cost the Collaboration Patents that are [*] under Section [*], in each case against any infringement that adversely affects or is expected to adversely affect any[*] Product.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

(c) Regulatory Materials; Data. Within thirty (30) days of the effective date of such termination, Astellas shall transfer and assign to Cytokinetics, at no cost to Cytokinetics, all Regulatory Materials relating to any [*] Products, data from preclinical, non-clinical and clinical studies conducted by or on behalf of Astellas, its Affiliates or sublicensees relating to any [*] Products and all pharmacovigilance data (including all adverse event databases) relating to any[*] Products. At Cytokinetics' request, Astellas shall provide Cytokinetics with assistance with any inquiries and correspondence with Regulatory Authorities relating to any [*] Product for a period of [*] months after such termination.

(d) Trademarks. Astellas shall transfer and assign, and shall ensure that its Affiliates transfer and assign, to Cytokinetics, at no cost to Cytokinetics, all Product Marks relating to any [*] Product and any applications therefor (excluding any such marks that include, in whole or part, any corporate name or logos of Astellas or its Affiliates or sublicensees). Cytokinetics and its Affiliates and licensees shall have the right to use other identifiers specific to such [*] Product (e.g., Astellas compound identifiers). Astellas shall also transfer to Cytokinetics any in-process applications for generic names for any [*] Product.

(e) Transition Assistance. Astellas shall provide the following transitional assistance, at its own cost unless specifically set forth below.

(i) If this Agreement is terminated in its entirety, Astellas shall promptly return to Cytokinetics all Know-How, data, materials and other Confidential Information made available to Astellas by Cytokinetics under this Agreement.

(ii) Upon request by Cytokinetics after termination of this Agreement, Astellas shall promptly provide Cytokinetics with a copy of each license agreement, collaboration agreement and/or vendor agreement then effective between Astellas (or its Affiliates) and a Third Party with respect to any [*] Product, or the Development, Manufacture and Commercialization thereof. Upon Cytokinetics' request, Astellas shall use its Diligent Efforts to assign or sublicense, and shall ensure that its Affiliates assign or sublicense, to Cytokinetics any such agreement(s) and shall permit Cytokinetics access through any communication portal so established with such Third Party under any agreement so assigned to Cytokinetics.

(iii) Astellas shall, at Cytokinetics' request after termination of this Agreement, transfer (including when available, in electronic format) all Astellas Know-How and Collaboration Know-How relating to any [*] Products to Cytokinetics or its designee, including without limitation: study protocols, study results, analytical methodologies, CMC Information (including bulk and final product manufacturing processes, batch records, vendor information and validation documentation), expert opinions, analyses, in each case to the extent such materials pertain to any [*] Products, and shall provide Cytokinetics reasonable technical assistance in connection therewith. From and after such time, all such Know-How shall be deemed Confidential Information of Cytokinetics.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

(iv) Astellas shall transfer to Cytokinetics or its designee any and all inventory of [*] Products (including all research materials, final product, bulk drug substance, intermediates, work-in-process, formulation materials, reference standards, drug product clinical reserve samples, packaged retention samples, and the like) then in the possession of Astellas, its Affiliates or sublicensees at Astellas' Manufacturing Costs. Astellas shall continue or have continued any ongoing stability studies pertaining to any materials so transferred if such studies will take less than [*] to complete. The Parties will agree on the procedures by which to transfer any longer stability studies to Cytokinetics or its designee in a manner that minimizes the disruption of such studies.

(v) If at the time of such termination, Cytokinetics or its Affiliates are not Manufacturing a [*] Product, then, at Cytokinetics' request, Astellas shall: (A) [*] assign or transfer to Cytokinetics any Manufacturing agreement between Astellas and a Third Party contract manufacturer with respect to such [*] Product, and/or (B) transfer to Cytokinetics (or its designee) all Know-How and materials to enable Cytokinetics or such designee to assume the Manufacture and supply of such [*] Product and shall provide reasonable technical assistance in connection therewith;

(vi) If at the time of such termination, Astellas or its Affiliates are conducting any clinical trials for a [*] Product, then, at Cytokinetics' election on a trial-by-trial basis: (A) Astellas shall fully cooperate, and shall ensure that its Affiliates fully cooperate, with Cytokinetics to transfer the conduct of all such clinical trials to Cytokinetics. [*] the conduct of such clinical trials after the effective date of such termination (except to the extent [*]); or (B) Astellas shall, [*], orderly wind-down the conduct of any such clinical trial which is not assumed by Cytokinetics under clause (A). In each case [*] in connection with the conduct or wind-down of all such clinical trials as of the effective date of such termination.

(vii) In addition to the foregoing, Astellas shall use its Diligent Efforts with respect to those activities for which it is responsible to ensure orderly transition and uninterrupted Development, Manufacturing, Commercialization and Medical Affairs Activities of [*] Products by Cytokinetics and to enable Cytokinetics to enter into an agreement with a Third Party to continue these activities with minimal disruption and delay.

(viii) Astellas shall transfer to Cytokinetics all rights to publications relating to any [*] Products (including data to be published, manuscript in preparation and pending publications).

(f) **Termination Press Releases**. In the event of termination of this Agreement for any reason and subject to the provisions of Section 13.5, the Parties shall cooperate in good faith to coordinate public disclosure of such termination and the reasons therefor, and shall not, except to the extent required by applicable Law, disclose such information without the prior approval of the other Party. The principles to be observed in such disclosures shall be accuracy, compliance with applicable Law and regulatory guidance documents, and reasonable sensitivity to potential negative investor reaction to such news.

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14.4 Survival. Expiration or termination of this Agreement shall not relieve the Parties of any obligation accruing prior to such expiration or termination. Without limiting the foregoing, the provisions of Articles 1, 11 (solely with respect to payments accrued before the date of expiration or termination or [*]), 16 (solely with respect to Claims arising from actions and/or omissions during the Term) and 17, and Sections 3.4(f), 3.8, 8.6, 12.1(a), 12.1(b) (the second sentence only), 12.2, 12.3(c) (solely with respect to Astellas Patents to which Cytokinetics has a license after the effective date of expiration or termination), 13.1, 13.2, 13.3, 13.4 (second, third and fourth sentences only and solely in the event Astellas is the publishing Party; all reference to the Responsible Committee shall instead refer to Cytokinetics), 13.5, 13.6, 14.3, 14.4, 14.5 and 15.5 shall survive the expiration or termination of this Agreement.

14.5 Termination Not Sole Remedy. Termination is not the sole remedy under this Agreement and, whether or not termination is effected and notwithstanding anything contained in this Agreement to the contrary, all other remedies shall remain available except as agreed to otherwise herein.

ARTICLE 15
REPRESENTATIONS AND WARRANTIES

15.1 Representations and Warranties of Each Party. Each Party represents and warrants to the other Party as of the Effective Date that:

(a) it is duly organized and validly existing under the laws of its jurisdiction of incorporation or formation, and has full corporate or other power and authority to enter into this Agreement and to carry out the provisions hereof;

(b) it has the full right, power and authority to enter into this Agreement, to perform its obligations hereunder; and

(c) this Agreement has been duly executed by it and is legally binding upon it, enforceable in accordance with its terms, and does not conflict with any agreement, instrument or understanding, oral or written, to which it is a party or by which it may be bound, nor violate any material law or regulation of any court, governmental body or administrative or other agency having jurisdiction over it.

15.2 Representations and Warranties by Cytokinetics. Cytokinetics represents and warrants to Astellas as of the Effective Date that:

(a) it has not previously assigned, transferred, conveyed or otherwise encumbered its right, title and interest in Cytokinetics Patents listed in **Exhibit C** in a manner that is inconsistent with the license granted to Astellas under Section 3.1;

(b) to Cytokinetics' knowledge, all Cytokinetics Patents are listed in **Exhibit C**;

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(c) it has the right to grant the license and rights herein to Astellas and it has not granted any license, right or interest in, to or under the Cytokinetics Patents listed in **Exhibit C** to any Third Party that is inconsistent with the license granted to Astellas under Section 3.1;

(d) it has not received any written notice from any Third Party asserting or alleging that (i) the development of Cytokinetics Patents listed in **Exhibit C** prior to the Effective Date or (ii) the practice of any Cytokinetics Know-How that is contemplated to be utilized in the Research Plan as the Research Plan exists as of the Effective Date, infringed or misappropriated the intellectual property rights of such Third Party;

(e) to Cytokinetics' knowledge, (i) the practice of Cytokinetics Patents listed in **Exhibit C** prior to the Effective Date, and (ii) the practice of any Cytokinetics Know-How that is contemplated to be utilized in the Research Plan as the Research Plan exists as of the Effective Date, did not infringe any valid intellectual property rights owned or possessed by any Third Party and did not breach any obligation of confidentiality or non-use owed by Cytokinetics to a Third Party; and

(f) there are no judgments or settlements against or owed by Cytokinetics, and to Cytokinetics' knowledge, there are no pending or threatened claims or litigation, in each case relating to Cytokinetics Patents listed in **Exhibit C**.

15.3 Representations and Warranties by Astellas. Astellas represents and warrants to Cytokinetics as of the Effective Date that:

(a) it has not previously assigned, transferred, conveyed or otherwise encumbered its right, title and interest in Astellas Patents listed in **Exhibit A** in a manner that is inconsistent with the license granted to Cytokinetics under Section 3.4;

(b) to Astellas' knowledge, all Astellas Patents are listed in **Exhibit A**;

(c) it has the right to grant the license and rights herein to Cytokinetics and it has not granted any license, right or interest in, to or under the Astellas Patents listed in **Exhibit A** to any Third Party that is inconsistent with the license granted to Cytokinetics under Section 3.4;

(d) it has not received any written notice from any Third Party asserting or alleging that: (i) the development of Astellas Patents listed in **Exhibit A** prior to the Effective Date, or (ii) the practice of any Astellas Know-How that is contemplated to be utilized in the Research Plan as the Research Plan exists as of the Effective Date, infringed or misappropriated the intellectual property rights of such Third Party;

(e) to Astellas' knowledge, there are no [*];

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

(f) to Astellas' knowledge, (i) the practice of Astellas Patents listed in **Exhibit A** prior to the Effective Date, and (ii) the practice of any Astellas Know-How that is contemplated to be utilized in the Research Plan as the Research Plan exists as of the Effective Date, did not infringe any valid intellectual property rights owned or possessed by any Third Party and did not breach any obligation of confidentiality or non-use owed by Astellas to a Third Party; and

(g) there are no judgments or settlements against or owed by Astellas, and to Astellas' knowledge, there are no pending or threatened claims or litigation, in each case relating to Astellas Patents listed in **Exhibit A**.

15.4 Mutual Covenants.

(a) **No Debarment**. In the course of the Research, Development, Manufacture and Commercialization of the Compounds and Collaboration Products, neither Party nor its Affiliates shall use any employee or consultant (including of any sublicensee), who has been debarred or disqualified by any Regulatory Authority, or, to such Party's or its Affiliates' knowledge, is the subject of debarment or disqualification proceedings by a Regulatory Authority. Each Party shall notify the other Party promptly upon becoming aware that any of its or its Affiliates' employees or consultants has been debarred or is the subject of debarment or disqualification proceedings by any Regulatory Authority.

(b) **Compliance**. Each Party and its Affiliates shall comply in all material respects with all applicable Laws (including all anti-bribery laws) in the Research, Development, Manufacture, Commercialization and Medical Affairs Activities of the Compounds and Collaboration Products and performance of its obligations under this Agreement.

15.5 No Other Warranties. EXCEPT AS EXPRESSLY STATED IN THIS ARTICLE 15, (A) NO REPRESENTATION, CONDITION OR WARRANTY WHATSOEVER IS MADE OR GIVEN BY OR ON BEHALF OF ASTELLAS OR CYTOKINETICS; AND (B) ALL OTHER CONDITIONS AND WARRANTIES WHETHER ARISING BY OPERATION OF LAW OR OTHERWISE ARE HEREBY EXPRESSLY EXCLUDED, INCLUDING ANY CONDITIONS AND WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT.

ARTICLE 16
INDEMNIFICATION; LIABILITY; INSURANCE

16.1 Indemnification by Cytokinetics. Cytokinetics shall indemnify and hold Astellas, its Affiliates and sublicensees and their respective officers, directors, agents and employees ("**Astellas Indemnitees**") harmless from and against any Claims against them to the extent arising or resulting from:

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(a) the Research, Development, Manufacture, Co-Promotion, or Commercialization or Medical Affairs Activities of the Compounds and/or Collaboration Products by Cytokinetics or any of its Affiliates, licensees, sublicensees, distributors or contractors; or

(b) the negligence, recklessness or willful misconduct of any of the Cytokinetics Indemnitees; or

(c) the breach of any of the warranties or representations made by Cytokinetics to Astellas under this Agreement; or

(d) the breach by Cytokinetics of its obligations pursuant to this Agreement;

except in each case, to the extent such Claims result from the breach by any Astellas Indemnitee of any covenant, representation, warranty or other agreement made by Astellas in this Agreement or the negligence, recklessness or willful misconduct of any Astellas Indemnitee.

16.2 Indemnification by Astellas. Astellas shall indemnify and hold Cytokinetics, its Affiliates, and their respective officers, directors, agents and employees ("**Cytokinetics Indemnitees**") harmless from and against any Claims arising under or related to this Agreement against them to the extent arising or resulting from:

(a) the Research, Development, Manufacture, Commercialization or Medical Affairs Activities of the Compounds and/or Collaboration Products by Astellas or any of its Affiliates, licensees, sublicensees, distributors or contractors; or

(b) the negligence, recklessness or willful misconduct of any of the Astellas Indemnitees; or

(c) the breach of any of the warranties or representations made by Astellas to Cytokinetics under this Agreement; or

(d) any breach by Astellas of its obligations pursuant to this Agreement;

except in each case, to the extent such Claims result from the breach by any Cytokinetics Indemnitee of any covenant, representation, warranty or other agreement made by Cytokinetics in this Agreement or the negligence, recklessness or willful misconduct of any Cytokinetics Indemnitee.

16.3 Indemnification Procedure. If either Party is seeking indemnification under Sections 16.1 or 16.2 (the **"Indemnified Party"**), it shall inform the other Party (the **"Indemnifying Party"**) of the Claim giving rise to the obligation to indemnify pursuant to such Section as soon as reasonably practicable after receiving notice of the Claim. The Indemnifying Party shall have the right to assume the defense of any such Claim for which it is obligated to indemnify the Indemnified Party. The Indemnified Party shall cooperate with the Indemnifying

Party and the Indemnifying Party's insurer as the Indemnifying Party may reasonably request, and at the Indemnifying Party's cost and expense. The Indemnified Party shall have the right to participate, at its own expense and with counsel of its choice, in the defense of any Claim that has been assumed by the Indemnifying Party. Neither Party shall have the obligation to indemnify the other Party in connection with any settlement made without the Indemnifying Party's written consent, which consent shall not be unreasonably withheld or delayed. If the Parties cannot agree as to the application of Section 16.1 or 16.2 as to any Claim, pending resolution of the dispute pursuant to Section 17.6(a), the Parties may conduct separate defenses of such Claims, with each Party retaining the right to claim indemnification from the other Party in accordance with Section 16.1 or 16.2 upon resolution of the underlying Claim.

16.4 Mitigation of Loss. Each Indemnified Party shall take and shall procure that its Affiliates take all such reasonable steps and action as are reasonably necessary or as the Indemnifying Party may reasonably require in order to mitigate any Claims (or potential losses or damages) under this Article 16. Nothing in this Agreement shall or shall be deemed to relieve any Party of any common law or other duty to mitigate any losses incurred by it.

16.5 Limitation of Liability. NEITHER PARTY SHALL BE LIABLE TO THE OTHER FOR ANY SPECIAL, CONSEQUENTIAL, INCIDENTAL, PUNITIVE, OR INDIRECT DAMAGES ARISING FROM OR RELATING TO ANY BREACH OF THIS AGREEMENT, REGARDLESS OF ANY NOTICE OF THE POSSIBILITY OF SUCH DAMAGES. NOTWITHSTANDING THE FOREGOING, NOTHING IN THIS SECTION 16.5 IS INTENDED TO OR SHALL LIMIT OR RESTRICT THE INDEMNIFICATION RIGHTS OR OBLIGATIONS OF ANY PARTY UNDER SECTION 16.1 OR 16.2, OR DAMAGES AVAILABLE FOR A PARTY'S BREACH OF ITS OBLIGATIONS RELATING TO CONFIDENTIALITY OR INTELLECTUAL PROPERTY HEREUNDER.

16.6 Insurance. Each Party shall procure and maintain insurance, including product liability insurance, with respect to its activities hereunder and which is consistent with normal business practices of prudent companies similarly situated at all times during which any Collaboration Product is being clinically tested in human subjects or commercially distributed or sold. Each Party shall provide the other Party with evidence of such insurance upon request and shall provide the other Party with written notice at least [*] days prior to the cancellation, non-renewal or material changes in such insurance. Such insurance shall not be construed to create a limit of either Party's liability with respect to its indemnification obligations under this Article 16.

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ARTICLE 17
GENERAL PROVISIONS

17.1 Force Majeure. Neither Party shall be held liable to the other Party nor be deemed to have defaulted under or breached this Agreement for failure or delay in performing any obligation under this Agreement to the extent such failure or delay is caused by or results from causes beyond the reasonable control of the affected Party, potentially including embargoes, war, acts of war (whether war be declared or not), acts of terrorism, insurrections, riots, civil commotions, strikes, lockouts or other labor disturbances, fire, floods, earthquakes or other acts of God, or acts, generally applicable action or inaction by any governmental authority (but excluding any government action or inaction that is specific to such Party, its Affiliates or sublicensees, such as revocation or non-renewal of such Party's license to conduct business), or omissions or delays in acting by the other Party, or unavailability of materials related to the Manufacture of Compounds or Collaboration Products. The affected Party shall notify the other Party in writing of such force majeure circumstances as soon as reasonably practical, and shall promptly undertake and continue diligently all reasonable efforts necessary to cure such force majeure circumstances or to perform its obligations in spite of the ongoing circumstances.

17.2 Assignment. This Agreement may not be assigned or otherwise transferred, nor may any right or obligation hereunder be assigned or transferred, by either Party without the prior written consent of the other Party. Notwithstanding the foregoing, either Party may, without consent of the other Party, assign this Agreement and its rights and obligations hereunder in whole or in part to an Affiliate of such Party, or in whole to its successor-in-interest in connection with the sale of all or substantially all of its stock or its assets to which this Agreement relates, or in connection with a merger, acquisition or similar transaction. Any attempted assignment not in accordance with this Section 17.2 shall be null and void and of no legal effect. Any permitted assignee shall assume all assigned obligations of its assignor under this Agreement. The terms and conditions of this Agreement shall be binding upon, and shall inure to the benefit of, the Parties and their respected successors and permitted assigns.

17.3 Severability. If any one or more of the provisions contained in this Agreement is held invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions contained herein shall not in any way be affected or impaired thereby, unless the absence of the invalidated provision(s) adversely affects the substantive rights of the Parties. The Parties shall in such an instance use their best efforts to replace the invalid, illegal or unenforceable provision(s) with valid, legal and enforceable provision(s) which, insofar as practical, implement the purposes of this Agreement.

17.4 Notices. All notices which are required or permitted hereunder shall be in writing and sufficient if delivered personally, sent by facsimile (and promptly confirmed by personal delivery, registered or certified mail or overnight courier), sent by nationally-recognized overnight courier or sent by registered or certified mail, postage prepaid, return receipt requested, addressed as follows:

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

If to Cytokinetics:

Cytokinetics, Inc.
280 East Grand Avenue
South San Francisco, CA 94080
USA
Attn: President
Fax: 650-624-3010
Copy to: General Counsel

with a copy to:

Cooley LLP
3175 Hanover Street
Palo Alto, CA 94304, USA
Attn: Robert L. Jones, Esq.
Fax: (650) 849-7400

If to Astellas:

Astellas Pharma Inc.
2-5-1, Nihonbashi-Honcho
Chuo-ku, Tokyo 103-8411
Japan
Attn: Vice President, Business Development
Fax: 81-3-5203-7164

with a copy to:

Astellas Pharma Inc.
2-5-1, Nihonbashi-Honcho
Chuo-ku, Tokyo 103-8411
Japan
Attn: Vice President, Legal
Fax: 81-3-3244-5811

or to such other address(es) as the Party to whom notice is to be given may have furnished to the other Party in writing in accordance herewith. Any such notice shall be deemed to have been given: (a) when delivered if personally delivered or sent by facsimile on a Business Day (or if delivered or sent on a non-Business Day, then on the next Business Day); (b) on the fifth (5th) Business Day after dispatch if sent by nationally-recognized overnight courier; or (c) on the tenth (10th) Business Day following the date of mailing, if sent by mail.

17.5 Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of [*] and the patent laws of the United States without reference to any rules of conflict of laws.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

17.6 Dispute Resolution.

(a) The Parties shall negotiate in good faith and use reasonable efforts to settle any dispute, controversy or claim arising from or related to this Agreement or the breach thereof. If the Parties do not fully settle, and a Party wishes to pursue the matter, each such dispute, controversy or claim that is not a matter addressed in Section [*] shall be finally shall be settled by binding arbitration administered by [*] pursuant to its [*] then in effect (the **"**[*] **Rules"**), except as otherwise provided herein. The arbitration shall be governed by the United States Federal Arbitration Act, 9 U.S.C. §§ 1-16 (the **"Federal Arbitration Act"**), to the exclusion of any inconsistent state laws. The U.S. Federal Rules of Civil Procedure shall govern discovery and the U.S. Federal Rules of Evidence shall govern evidence for the arbitration. The arbitration will be conducted in San Francisco, California and the Parties consent to the personal jurisdiction of the United States federal courts, for any case arising out of or otherwise related to this arbitration, its conduct and its enforcement. Any situation not expressly covered by this Agreement shall be decided in accordance with the [*] Rules. The arbitrator shall be one (1) neutral, independent and impartial arbitrator selected from a pool of retired federal judges to be presented to the Parties by [*]. Failing the agreement of the Parties as to the selection of the arbitrator within [*] days, the arbitrator shall be appointed by [*] in accordance with the[*] Rules. Notwithstanding any other provision of this Section 17.6(a), either Party shall have the right to seek and be granted exigent, injunctive or temporary relief in any court of competent jurisdiction.

(b) Any unresolved dispute between the Parties under Section [*] as follows. The Parties shall agree on [*] both Parties and all of [*] relating to [*], each Party shall [*] and the other Party [*] with any relevant [*]. [*], each Party may [*] the other Party's [*] may also [*] days after the Parties have [*] at which time each Party shall [*] to the Parties [*], provided that the [*]. Neither Party shall have any [*] without the participation of the other Party. Within [*] days after [*] on such [*] the Parties. The [*].

17.7 Foreign Corrupt Practices Act Compliance.

(a) **Compliance with FCPA**. The U.S. government imposes and enforces prohibitions on the payment or transfer of anything of value to governments, government officials, political parties or political party officials (or relatives or associates of such officials) ("**FCPA Covered Person**") for the purpose of illegally influencing them, whether directly or indirectly, to obtain or retain business. This U.S. law is referred to as the Foreign Corrupt Practices Act ("**FCPA**"), and it can have application to conduct of a U.S. corporation's foreign subsidiaries, employees, agents and distributors. A summary of the law and related information can be found at http://www.justice.gov/criminal/fraud/fcpa. By signing this Agreement, each Party warrants that:

(i) It is familiar with the provisions and restrictions contained in the OECD Convention and FCPA.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

(ii) It shall comply with the FCPA in marketing, selling and/or servicing the Collaboration Products under this Agreement.

(iii) It shall not, in the course of its duties under the Agreement, offer, promise, give, demand, seek or accept, directly or indirectly, any gift or payment, consideration or benefit in kind to any FCPA Covered Person that would or could be construed as an illegal or corrupt practice.

(iv) It is not an FCPA Covered Person or affiliated with any FCPA Covered Person.

(v) It shall immediately notify the other Party of any attempt by any FCPA Covered Person to directly or indirectly solicit, ask for, or attempt to extort anything of value from the first Party, and shall refuse any such solicitation, request or extortionate demand except a facilitating payment as expressly permitted under the FCPA.

(b) **Compliance Certificate**. From time to time upon request from one Party, the other Party shall submit a compliance certificate in the form set forth in **Exhibit K** stating that (i) it fully understands its obligations under this Section 17.7 and any other applicable laws and regulations mentioned herein or as may come into existence from time to time after the Effective Date; (ii) it has been complying with this Section 17.7 and any other applicable laws and regulations mentioned herein or as may come into existence from time to time after the Effective Date; and (iii) it will continue to comply with this Section 17.7 and any other applicable laws and regulations mentioned herein or as may come into existence from time to time after the Effective Date.

(c) **No Action**. In no event shall one Party be obligated under the Agreement to take any action or omit to take any action that such Party believes, in good faith, would cause it to be in violation of any applicable laws and regulations, including the anti-bribery laws referenced in this Section 17.7.

(d) **Due Diligence**. Each Party shall have the right to visit the offices of the other Party from time to time during the term of the Agreement on an "as needed" basis and conduct due diligence in relation to the other Party's business related to performance of its obligations under this Section 17.7 and may do so in the way it deems necessary, appropriate or desirable so as to ensure that the other Party complies with this Section 17.7 and any other applicable laws and regulations in its business operations. Each Party shall make every effort to cooperate fully with the other Party in any such due diligence.

(e) **Audit**. In the event that one Party has reason to believe that a breach of any obligation of the other Party under this Section 17.7 has occurred or may occur, the first Party shall have the right to select an independent third party to conduct an audit of the other Party and review relevant books and records of the other Party, to satisfy itself that no breach has occurred. Unless otherwise required under applicable laws and regulations or by order of a competent court or regulatory authority, the first Party shall ensure that the selected independent

third party will keep confidential all audited matters and the results of the audit. The first Party does reserve the right to disclose to the U.S. or foreign government, its agencies and/or any other government or non-government party, information relating to a possible violation by the other Party of any applicable law, including a violation of the FCPA or any other applicable anti-bribery law.

17.8 Entire Agreement; Amendments. This Agreement, together with the Exhibits hereto and the FSRA Agreement, contains the entire understanding of the Parties with respect to the collaboration and the licenses granted hereunder and shall supersede the Existing Agreement (and for clarity the survival provisions of the Existing Agreement shall be of no effect unless incorporated into the FSRA Agreement and this Agreement). Any other express or implied agreements and understandings, negotiations, writings and commitments, either oral or written, in respect to the collaboration and the licenses granted hereunder are superseded by the terms of this Agreement. The Exhibits to this Agreement are incorporated herein by reference and shall be deemed a part of this Agreement. This Agreement may be amended, or any term hereof modified, only by a written instrument duly executed by authorized representative(s) of both Parties hereto. The Parties agree that, effective as of the Effective Date, the Existing Agreement shall be superseded by this Agreement, and that any disclosures made prior to the Effective Date shall be subject to the confidentiality and non-use provisions of this Agreement.

17.9 Headings. The captions to the several Articles, Sections and subsections hereof are not a part of this Agreement, but are merely for convenience to assist in locating and reading the several Articles and Sections hereof.

17.10 Independent Contractors. Cytokinetics and Astellas are independent contractors and that the relationship between the two Parties shall not constitute a partnership, joint venture or agency. Neither Cytokinetics nor Astellas shall have the authority to make any statements, representations or commitments of any kind, or to take any action, which shall be binding on the other Party, without the prior written consent of the other Party.

17.11 Waiver. The waiver by either Party hereto of any right hereunder, or of any failure of the other Party to perform, or of any breach by the other Party, shall not be deemed a waiver of any other right hereunder or of any other breach by or failure of such other Party whether of a similar nature or otherwise.

17.12 Cumulative Remedies. No remedy referred to in this Agreement is intended to be exclusive, but each shall be cumulative and in addition to any other remedy referred to in this Agreement or otherwise available under law.

17.13 Waiver of Rule of Construction. Each Party has had the opportunity to consult with counsel in connection with the review, drafting and negotiation of this Agreement. Accordingly, no ambiguity in this Agreement shall be strictly construed against either Party.

17.14 Business Day Requirements. In the event that any notice or other action or omission is required to be taken by a Party under this Agreement on a day that is not a Business

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Day then such notice or other action or omission shall be deemed to be required to be taken on the next occurring Business Day.

17.15 Translations. This Agreement is in the English language only, which language shall be controlling in all respects, and all versions hereof in any other language shall be for accommodation only and shall not be binding upon the Parties. All communications and notices to be made or given pursuant to this Agreement, and any dispute proceeding related to or arising hereunder, shall be in the English language. If there is a discrepancy between any translation of this Agreement and this Agreement, this Agreement shall prevail.

17.16 Further Actions. Each Party agrees to execute, acknowledge and deliver such further instruments, and to do all such other acts, as necessary or appropriate in order to carry out the purposes and intent of this Agreement.

17.17 Counterparts. This Agreement may be executed in two or more counterparts by original signature, facsimile or PDF files, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

17.18 Relationship with Existing Agreement. This execution and performance of this Agreement shall be without prejudice to any accrued liabilities under the Existing Agreement in accordance with its terms.

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[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

IN WITNESS WHEREOF, the Parties intending to be bound have caused this Agreement to be executed by their duly authorized representatives as of the Effective Date.

Cytokinetics, Inc.

By: _____

Name: Robert I. Blum

Title: President and CEO

Astellas Pharma Inc.

By: _____

Name: Ken Kubota

Title: Corporate Vice President,
Head of Business Development

LIST OF EXHIBITS

Exhibit A:	**Existing Astellas Patents**
Exhibit B:	**Compound Criteria**
Exhibit C:	**Existing Cytokinetics Patents**
Exhibit D:	**[Omitted]**
Exhibit E:	[*] **Patent Rights**
Exhibit F:	**Alliance Managers and Committee Members**
Exhibit G:	**[Omitted]**
Exhibit H:	**[Omitted]**
Exhibit I:	**Term sheet for Co-Promotion Agreement**
Exhibit J:	**[Omitted]**
Exhibit K:	**Form of Certificate of Compliance**
Exhibit L:	[*] **Indications**

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

Exhibit A
Existing Astellas Patents

[*]

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

Exhibit B
Compound Criteria

[*]

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

Exhibit C
Existing Cytokinetics Patents

[*]

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

Exhibit E
[*] Patent Rights

[*]

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

Exhibit F
Alliance Managers and Committee Members

	Astellas	Cytokinetics
Joint Steering Committee	[*]	[*]
Joint Research Committee	[*]	[*]
Joint Development Committee	[*]	[*]
Joint Manufacturing Committee	[*]	[*]
Joint Patent Committee	[*]	[*]
Alliance Managers	[*]	[*]

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

Exhibit I
Term sheet for Co-Promotion Agreement for Collaboration Products

This Exhibit I sets forth material terms and conditions that, together with the terms of Section 9.6 of the Agreement, shall be incorporated into a Co-Promotion Agreement to be negotiated and entered into by the Parties for the Collaboration Product for which Cytokinetics exercises its option to Co-Promote in accordance with Section 9.6 of the Agreement (such Collaboration Product, the "**Co-Promotion Product**").

[*]

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

Exhibit K
Form of Certificate of Compliance

I, [_____] of Astellas Pharma Inc., which is conducting business with Cytokinetics, Inc. per our License and Collaboration Agreement dated [_____].

I hereby acknowledge and certify that I am familiar and knowledgeable about the requirements of the FCPA and other applicable Anti-Corruption Laws and their requirements.

I certify that Astellas has not, and will not, take any action in furtherance of an unlawful offer, promise, or payment to a foreign official that would cause Cytokinetics, Inc. to be in violation of the FCPA, any other applicable Anti-Corruption Law. I further certify that Astellas has made no agreement or commitment, directly or indirectly, which, if carried out in the future, would cause Cytokinetics, Inc. to be in violation of the FCPA or any other applicable Anti-Corruption Law.

"**FCPA**" shall mean the U.S. Foreign Corrupt Practices Act (15 U.S.C. Section 78dd-1, et seq.) as amended.

"**Anti-Corruption Laws**" shall mean all applicable laws, regulations, orders, judicial decisions, conventions and international financial institution rules regarding corruption, bribery, ethical business conduct, money laundering, political contributions, gifts and gratuities, or lawful expenses to public officials and private persons, agency relationships, commissions, lobbying, books and records, and financial controls.

Signature: _____
Printed Name: _____
Title: _____
Company: Astellas Pharma Inc.
Dated: _____

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

Form of Certificate of Compliance

I, [_____] of Cytokinetics, Inc., which is conducting business with Astellas Pharma Inc. per our License and Collaboration Agreement dated [_____].

I hereby acknowledge and certify that I am familiar and knowledgeable about the requirements of the FCPA and other applicable Anti-Corruption Laws and their requirements.

I certify that Cytokinetics has not, and will not, take any action in furtherance of an unlawful offer, promise, or payment to a foreign official that would cause Astellas Pharma Inc. to be in violation of the FCPA, any other applicable Anti-Corruption Law. I further certify that Cytokinetics has made no agreement or commitment, directly or indirectly, which, if carried out in the future, would cause Astellas Pharma Inc. to be in violation of the FCPA or any other applicable Anti-Corruption Law.

"**FCPA**" shall mean the U.S. Foreign Corrupt Practices Act (15 U.S.C. Section 78dd-1, et seq.) as amended.

"**Anti-Corruption Laws**" shall mean all applicable laws, regulations, orders, judicial decisions, conventions and international financial institution rules regarding corruption, bribery, ethical business conduct, money laundering, political contributions, gifts and gratuities, or lawful expenses to public officials and private persons, agency relationships, commissions, lobbying, books and records, and financial controls.

Signature:	_____
Printed Name:	_____
Title:	_____
Company:	Cytokinetics, Inc.
Dated:	_____

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would likely cause competitive harm if publicly disclosed.

Exhibit L
[*] Indications

[*]

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Exhibit 31.1

CERTIFICATION OF THE CHIEF EXECUTIVE OFFICER
Pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Securities Exchange Act, as amended

I, Robert I. Blum, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Cytokinetics, Incorporated;

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 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 the 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 officers 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 that 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.

Dated: August 7, 2020

By: /s/ Robert I. Blum
Robert I. Blum
President and Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION OF THE CHIEF FINANCIAL OFFICER
Pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Securities Exchange Act, as amended

I, Ching Jaw, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Cytokinetics, Incorporated;

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 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 the 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 officers 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 that 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.

Dated: August 7, 2020

By: /s/ Ching Jaw
Ching Jaw
Senior Vice President, Chief Financial Officer
(Principal Financial Officer)

Exhibit 31.3

CERTIFICATION OF THE CHIEF ACCOUNTING OFFICER
Pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Securities Exchange Act, as amended

I, Robert Wong, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Cytokinetics, Incorporated;

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 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 the 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 officers 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 that 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.

Dated: August 7, 2020

By: /s/ Robert Wong
Robert Wong
Vice President, Chief Accounting Officer
(Principal Accounting Officer)

Exhibit 32.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER, CHIEF FINANCIAL OFFICER, AND CHIEF ACCOUNTING OFFICER
Pursuant to 18. U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

I certify, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. Section 1350, that the Quarterly Report of Cytokinetics, Incorporated on Form 10-Q for the quarterly period ended June 30, 2020 fully complies with the requirements of Section 13(a) of the Securities Exchange Act of 1934 (15 U.S.C. 78m) and the that information contained in such Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of Cytokinetics, Incorporated.

Dated: August 7, 2020

/s/ Robert I. Blum
Robert I. Blum
President and Chief Executive Officer
(Principal Executive Officer)

/s/ Ching Jaw
Ching Jaw
Senior Vice President, Chief Financial Officer
(Principal Financial Officer)

/s/ Robert Wong
Robert Wong
Vice President, Chief Accounting Officer
(Principal Accounting Officer)