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 March 31, 2021

OR

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

For the transition period from _____ to _____

Commission file number 000-30171

SANGAMO THERAPEUTICS, INC.
(Exact name of registrant as specified in its charter)

Delaware	**68-0359556**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**

7000 Marina Blvd., Brisbane, California, 94005
(Address of principal executive offices) (Zip Code)

(510) 970-6000
(Registrant's telephone number, including area code)

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value $0.01 per share	SGMO	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 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 ☒

As of April 30, 2021, 143,881,477 shares of the issuer's common stock, par value $0.01 per share, were outstanding.

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SANGAMO THERAPEUTICS, INC.

Unless otherwise indicated or the context suggests otherwise, references in this Quarterly Report on Form 10-Q, or Quarterly Report, to "Sangamo," "the Company," "we," "us," and "our" refer to Sangamo Therapeutics, Inc. and our subsidiaries, including Sangamo Therapeutics France S.A.S. and Sangamo Therapeutics UK Ltd.

Any third-party trade names, trademarks and service marks appearing in this Quarterly Report are the property of their respective holders.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This report contains "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. These statements relate to our future events, including our anticipated operations, research, development, manufacturing and commercialization activities, clinical trials, operating results and financial condition. Forward-looking statements may include, but are not limited to, statements about:

- our strategy;
- anticipated research and development of product candidates and potential commercialization of any resulting approved products;
- the initiation, scope, rate of progress, enrollment, anticipated results and timing of our preclinical studies and clinical trials and those of our collaborators and strategic partners;
- the therapeutic and commercial potential of our product candidates, including the durability of therapeutic effects;
- the therapeutic and commercial potential of technologies used by us in our product candidates, including our gene therapy and cell therapy technologies, our zinc finger protein technology platform, zinc finger nucleases and zinc finger protein transcription factors;
- our ability to establish and maintain collaborations and strategic partnerships and realize the expected benefits of such arrangements;
- anticipated revenues from existing and new collaborations and the timing thereof;
- our estimates regarding the impact of the COVID-19 pandemic on our business and operations and the business and operations of our collaborators, including clinical trials and manufacturing, and our ability to manage such impacts;
- our research and development and other expenses;
- our ability to obtain adequate preclinical and clinical supplies of our product candidates from current and potential new suppliers and manufacturers or from our own in-house manufacturing facilities;
- the ability of Sangamo and our collaborators and strategic partners to obtain and maintain regulatory approvals for product candidates and the timing and costs associated with obtaining regulatory approvals;
- our ability to comply with, and the impact of, regulatory requirements, obligations and restrictions on our business and operations;
- our ability to protect our intellectual property and operate our business without infringing upon the intellectual property rights of others, including our ability to obtain rights to the gene transfer technologies required to develop and commercialize our product candidates;
- competitive developments, including the impact on our competitive position of rival products and product candidates and our ability to meet competition from rival products and product candidates;
- our estimates regarding the sufficiency of our cash resources and our expenses, capital requirements and need for additional financing, and our ability to obtain additional financing;
- our ability to manage the growth of our business;
- our projected operating and financial performance;
- our operational and legal risks; and
- our plans, objectives, expectations and intentions and any other statements that are not historical facts.

In some cases, you can identify forward-looking statements by use of future dates or by terms such as: "anticipates," "believes," "continues," "could," "estimates," "expects," "intends," "may," "plans," "seeks," "should," "will," "likely," "ongoing," "project," "assume," "target," "forecast," "guidance," "objective," "aim," "goal" and similar expressions intended to identify forward-looking statements. These statements reflect our current views with respect to future events, are based on assumptions and involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performances or achievements expressed or implied by the forward-looking statements. These risks and uncertainties include, without limitation:

- We are a clinical-stage biotechnology company with no approved products or product revenues. Our success depends substantially on clinical trial results demonstrating safety and efficacy of our product candidates and durability of therapeutic effects to the satisfaction of regulatory authorities. Obtaining positive clinical trial results and regulatory approvals is expensive, lengthy, challenging and unpredictable and may never occur for any product candidates.
- Many of our product candidates are based on novel zinc finger protein technologies that have yet to yield any approved commercially viable therapeutic products.
- We have incurred significant operating losses since inception and anticipate continued losses for the foreseeable future. We may never become profitable.
- We require additional capital to fund our operations and continue operating as a viable business. This additional capital may not be available to us on favorable terms or at all.

- We rely heavily on collaborations with larger biopharmaceutical companies to generate revenues and develop, obtain regulatory approvals for and commercialize many of our product candidates. If conflicts arise with our collaborators or if the collaborations terminate for any reason, our revenues and product development efforts would be negatively impacted.
- Biotechnology and genomic medicine are highly competitive businesses. Our competitors may develop rival technologies and products that are superior to or are commercialized more quickly than our technologies and product candidates.
- Manufacturing genomic medicines is complex, expensive, highly regulated and risky. We currently rely heavily on third-party manufacturers and have limited experience manufacturing products ourselves. Manufacturing challenges may result in unexpected costs, supply interruptions and harm and delay to our product development efforts.
- Even if we obtain regulatory approvals for our product candidates, our approved products may not gain market acceptance among physicians and patients and adequate coverage and reimbursement from third-party payors and may not demonstrate commercial viability.
- We may not be able to obtain, maintain and enforce necessary and desirable intellectual property protections for our technologies and product candidates in all desired jurisdictions, which could adversely affect the value of our technologies and our product development efforts and could increase the risks of costly, lengthy and distracting litigation with unpredictable results.
- Our success depends on hiring, integrating and retaining additional highly qualified skilled employees and retaining current key executives and employees, which may be challenging given that competition for these individuals is intense.
- The evolving COVID-19 pandemic could continue to adversely impact our business and operations and the business and operations of our collaborators, manufacturers and other business partners. If such impacts become material, our revenues and product development efforts could be negatively impacted.
- The market price of our common stock has been and will likely continue to be volatile, and you could lose all or part of any investment in our common stock

Additional discussion of the risks, uncertainties and other factors described above, as well as other risks and uncertainties material to our business, can be found under “Risk Factors” in Part I, Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2020 as filed with the SEC on February 24, 2021, and we encourage you to refer to that additional discussion. Given these risks, uncertainties and other factors, you should not place undue reliance on these forward-looking statements. Also, these forward-looking statements represent our plans, objectives, estimates, expectations and intentions only as of the date of this filing. You should read this report completely and with the understanding that our actual future results and the timing of events may be materially different from what we expect, and we cannot otherwise guarantee that any forward-looking statement will be realized. We hereby qualify all of our forward-looking statements by these cautionary statements.

Except as required by law, we undertake no obligation to update or supplement any forward-looking statements publicly, or to update or supplement the reasons that actual results could differ materially from those anticipated in these forward-looking statements, even if new information becomes available in the future. You are advised, however, to consult any further disclosures we make on related subjects.

This report includes discussion of certain clinical studies and trials relating to various product candidates. These studies typically are part of a larger body of clinical data relating to such product candidates, and the discussion herein should be considered in the context of the larger body of data. In addition, clinical data are subject to differing interpretations, and even when we view data as sufficient to support the safety and/or effectiveness of a product candidate, regulatory authorities may not share our views and may require additional data or may deny approval altogether.

PART I. FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

SANGAMO THERAPEUTICS, INC.

CONDENSED CONSOLIDATED BALANCE SHEETS
(Unaudited; in thousands)

	March 31, 2021	December 31, 2020
ASSETS		
Current assets:		
Cash and cash equivalents	$ 122,975	$ 131,329
Marketable securities	464,109	510,094
Interest receivable	974	1,035
Accounts receivable	6,746	5,224
Prepaid expenses and other current assets	12,140	11,986
Total current assets	606,944	659,668
Marketable securities, non-current	42,431	50,530
Property and equipment, net	45,222	41,324
Intangible assets	55,583	58,128
Goodwill	40,994	42,798
Operating lease right-of-use assets	70,324	71,045
Other non-current assets	14,097	13,557
Restricted cash	1,500	1,500
Total assets	$ 877,095	$ 938,550
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 11,638	$ 12,553
Accrued compensation and employee benefits	13,077	20,738
Other accrued liabilities	13,760	18,612
Deferred revenues	94,364	91,644
Total current liabilities	132,839	143,547
Deferred revenues, non-current	222,278	245,045
Long-term portion of lease liabilities	38,463	38,396
Deferred income tax	6,870	7,185
Other non-current liabilities	7,228	7,011
Total liabilities	407,678	441,184
Commitments		
Stockholders' equity:		
Preferred stock	—	—
Common stock	1,437	1,421
Additional paid-in capital	1,292,118	1,269,375
Accumulated deficit	(823,914)	(777,981)
Accumulated other comprehensive income	714	5,419
Total Sangamo Therapeutics, Inc. stockholders' equity	470,355	498,234
Non-controlling interest	(938)	(868)
Total stockholders' equity	469,417	497,366
Total liabilities and stockholders' equity	$ 877,095	$ 938,550

See accompanying Notes to Condensed Consolidated Financial Statements.

SANGAMO THERAPEUTICS, INC.

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(Unaudited; in thousands, except per share amounts)

	Three Months Ended March 31,	
	2021	2020
Revenues	$ 26,280	$ 13,076
Operating expenses:		
Research and development	56,434	41,479
General and administrative	16,148	16,119
Total operating expenses	72,582	57,598
Loss from operations	(46,302)	(44,522)
Interest and other income, net	625	1,548
Loss before taxes	(45,677)	(42,974)
Income tax expense	262	—
Net loss	(45,939)	(42,974)
Net loss attributable to non-controlling interest	(6)	(61)
Net loss attributable to Sangamo Therapeutics, Inc. stockholders	$ (45,933)	$ (42,913)
Basic and diluted net loss per share attributable to Sangamo Therapeutics, Inc. stockholders	$ (0.32)	$ (0.37)
Shares used in computing basic and diluted net loss per share attributable to Sangamo Therapeutics, Inc. stockholders	143,112	116,060

See accompanying Notes to Condensed Consolidated Financial Statements.

SANGAMO THERAPEUTICS, INC.

CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS
(Unaudited; in thousands)

	Three Months Ended March 31,	
	2021	2020
Net loss	$ (45,939)	$ (42,974)
Foreign currency translation adjustment	(4,749)	(1,633)
Change in unrealized gain on marketable securities, net of tax	44	254
Comprehensive loss	(50,644)	(44,353)
Comprehensive loss attributable to non-controlling interest	(6)	(61)
Comprehensive loss attributable to Sangamo Therapeutics, Inc.	$ (50,638)	$ (44,292)

See accompanying Notes to Condensed Consolidated Financial Statements.

SANGAMO THERAPEUTICS, INC.

CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(Unaudited; in thousands, except share amounts)

	Three Months Ended March 31, 2021						
	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Income	Non-Controlling Interest	Total Stockholders' Equity
	Shares	Amount					
Balances at December 31, 2020	142,063,203	$ 1,421	$ 1,269,375	$ (777,981)	$ 5,419	$ (868)	$ 497,366
Issuance of common stock in connection with at-the-market offering, net of offering expenses	1,034,762	10	15,641	—	—	—	15,651
Issuance of common stock upon exercise of stock options and in connection with restricted stock units, net of tax	615,800	6	(422)	—	—	—	(416)
Stock-based compensation	—	—	7,524	—	—	—	7,524
Acquisition of additional shares of Sangamo France	—	—	—	—	—	(64)	(64)
Foreign currency translation adjustment	—	—	—	—	(4,749)	—	(4,749)
Net unrealized gain on marketable securities, net of tax	—	—	—	—	44	—	44
Net loss	—	—	—	(45,933)	—	(6)	(45,939)
Balances at March 31, 2021	143,713,765	$ 1,437	$ 1,292,118	$ (823,914)	$ 714	$ (938)	$ 469,417

	Three Months Ended March 31, 2020						
	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Non-Controlling Interest	Total Stockholders' Equity
	Shares	Amount					
Balance at December 31, 2019	115,972,708	$ 1,160	$ 1,090,828	$ (656,985)	$ (2,449)	$ 185	$ 432,739
Issuance of common stock upon exercise of stock options and in connection with restricted stock units, net of tax	305,845	3	406	—	—	—	409
Stock-based compensation	—	—	5,620	—	—	—	5,620
Foreign currency translation adjustment	—	—	—	—	(1,633)	—	(1,633)
Net unrealized loss on marketable securities, net of tax	—	—	—	—	254	—	254
Net loss	—	—	—	(42,913)	—	(61)	(42,974)
Balances at March 31, 2020	116,278,553	$ 1,163	$ 1,096,854	$ (699,898)	$ (3,828)	$ 124	$ 394,415

See accompanying Notes to Condensed Consolidated Financial Statements.

SANGAMO THERAPEUTICS, INC.

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited; in thousands)

	Three Months Ended March 31,	
	2021	2020
Operating Activities:		
Net loss	$ (45,939)	$ (42,974)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	1,875	1,311
Amortization of premium (discount) on marketable securities	824	(744)
Amortization and other changes in operating lease right-of-use assets	2,023	1,886
Loss on free shares	27	73
Stock-based compensation	7,524	5,620
Net changes in operating assets and liabilities:		
Interest receivable	61	(244)
Accounts receivable	(1,522)	29,939
Prepaid expenses and other assets	(1,741)	(100)
Accounts payable and accrued liabilities	(3,829)	345
Accrued compensation and employee benefits	(7,561)	(4,965)
Deferred revenues	(20,047)	(8,319)
Long-term portion of lease liabilities	(1,045)	(887)
Other non-current liabilities	800	169
Net cash used in operating activities	(68,550)	(18,890)
Investing Activities:		
Purchases of marketable securities	(97,935)	(43,580)
Maturities of marketable securities	144,369	71,075
Sales of marketable securities	6,870	—
Purchases of property and equipment	(7,950)	(3,775)
Purchase of additional shares of Sangamo France	(65)	—
Net cash provided by investing activities	45,289	23,720
Financing Activities:		
Proceeds from at-the-market offering, net of offering expenses	15,651	—
Taxes paid related to net share settlement of equity awards	(2,234)	(411)
Proceeds from exercise of stock options and restricted stock units	1,818	820
Net cash provided by financing activities	15,235	409
Effect of exchange rate changes on cash, cash equivalents, and restricted cash	(328)	82
Net (decrease) increase in cash, cash equivalents, and restricted cash	(8,354)	5,321
Cash, cash equivalents, and restricted cash, beginning of period	132,829	81,928
Cash, cash equivalents, and restricted cash, end of period	$ 124,475	$ 87,249
Supplemental cash flow disclosures:		
Property and equipment included in unpaid liabilities	$ 2,953	$ 1,080
Right-of-use assets obtained in exchange for lease obligations	$ 1,356	$ —

See accompanying Notes to Condensed Consolidated Financial Statements.

SANGAMO THERAPEUTICS, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
March 31, 2021
(Unaudited)

NOTE 1—ORGANIZATION, BASIS OF PRESENTATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Business Overview

Sangamo Therapeutics, Inc. ("Sangamo" or "the Company") was incorporated in the State of Delaware in June 1995 and changed its name from Sangamo Biosciences, Inc. in January 2017. Sangamo is a clinical-stage genomic medicine company committed to translating ground-breaking science into medicines that transform the lives of patients with serious diseases.

Basis of Presentation

The accompanying unaudited Condensed Consolidated Financial Statements have been prepared in accordance with generally accepted accounting principles in the United States of America ("U.S. GAAP") for interim financial information and pursuant to the rules and regulations of the Securities and Exchange Commission ("SEC"). Accordingly, they do not include all of the information and footnotes required by U.S. GAAP for complete financial statements. In the opinion of management, all adjustments (consisting of normal recurring adjustments) considered necessary for a fair presentation of these financial statements for the periods presented have been included. Operating results for the three months ended March 31, 2021 are not necessarily indicative of the results that may be expected for the year ending December 31, 2021. The Condensed Consolidated Balance Sheet data at December 31, 2020 was derived from the audited Consolidated Financial Statements included in Sangamo's Annual Report on Form 10-K for the year ended December 31, 2020 (the "2020 Annual Report") as filed with the SEC on February 24, 2021.

The accompanying Condensed Consolidated Financial Statements include the accounts of the Company and its subsidiaries. All intercompany balances and transactions have been eliminated in the Condensed Consolidated Financial Statements. For consolidated entities where the Company owns or are exposed to less than 100% of the economics, the Company records net loss attributable to non-controlling interests on the Company's Condensed Consolidated Statements of Operations equal to the percentage of the economic or ownership interest retained in such entities by the respective non-controlling parties.

The accompanying Condensed Consolidated Financial Statements and related financial information should be read together with the audited Consolidated Financial Statements and footnotes for the year ended December 31, 2020, included in the 2020 Annual Report.

Liquidity and Management's Plan

Sangamo is currently working on a number of long-term development projects that involve experimental technologies. The projects may require several years and substantial expenditures to complete and ultimately may be unsuccessful. The Company plans to finance operations with available cash resources, collaborations and strategic partnerships funds, research grants and from the issuance of equity or debt securities. Sangamo believes that its available cash, cash equivalents and marketable securities as of March 31, 2021 and expected revenues from collaborations, strategic partnerships and research grants, will be adequate to fund its currently planned operations through at least the next 12 months from the date these Condensed Consolidated Financial Statements are issued. Sangamo will require substantial additional financial resources to complete the development and commercialization of its product candidates. Additional capital may not be available on terms acceptable to the Company, or at all. If adequate funds are not available, or if the terms of potential funding sources are unfavorable, the Company's business and ability to develop its technology and therapeutic products would be harmed. Furthermore, any sales of additional equity securities may result in dilution to the Company's stockholders, and any debt financing may include covenants that restrict the Company's business.

Summary of Significant Accounting Policies

Use of Estimates

The preparation of these Condensed Consolidated Financial Statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the amounts reported in the Condensed Consolidated Financial Statements and the accompanying notes. On an ongoing basis, management evaluates its estimates including critical accounting policies or estimates related to revenue recognition, clinical trial accruals, fair value of assets and liabilities, including from acquisitions, and stock-based compensation. Estimates are based on historical experience and on various other market specific and other relevant assumptions that the Company believes to be reasonable under the circumstances, the results of which form the

basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results could differ from those estimates.

There have been no changes in estimates during the three months ended March 31, 2021.

During the three months ended March 31, 2020, the Company recorded adjustments to revenue related to changes in estimates in connection with the collaboration agreements with Sanofi Genzyme ("Sanofi") and Pfizer Inc. ("Pfizer"). These changes in estimates were driven by changes in project scope and related project costs which resulted in changes to the measure of proportional cumulative performance. These adjustments increased revenue by $0.1 million, decreased net loss by $0.1 million and had no impact on the Company's basic net loss per share for the three months ended March 31, 2020.

Revenue Recognition

The Company accounts for its revenues pursuant to the provisions of Accounting Standards Codification ("ASC") Topic 606, *Revenue from Contracts with Customers* ("ASC Topic 606"). The Company's contract revenues are derived from collaboration agreements including licensing arrangements and research activity grants. Research and licensing agreements typically include upfront signing or license fees, cost reimbursements for research services, minimum sublicense fees, milestone payments and royalties on future licensee's product sales. The Company has agreements with both fixed and variable consideration. Non-refundable upfront fees and funding of research and development activities are considered fixed, while milestone payments are generally identified as variable consideration. Sangamo's research grants are typically multi-year agreements and provide for the reimbursement of qualified expenses for research and development as defined under the terms of the grant agreement. Revenues under research grant agreements are generally recognized when the related qualified research expenses are incurred. Deferred revenue primarily represents the portion of research or license payments received but not earned.

In determining the appropriate amount of revenue to be recognized as the Company fulfills its obligations under its agreements, the Company performs the following steps: (i) identification of the promised goods or services in the contract; (ii) determination of whether the promised goods or services are performance obligations, including whether they are distinct in the context of the contract; (iii) measurement of the transaction price, including the constraint on variable consideration; (iv) allocation of the transaction price to the performance obligations based on estimated selling prices; and (v) recognition of revenue when (or as) the Company satisfies each performance obligation.

A performance obligation is a promise in a contract to transfer a distinct good or service to the customer and is the unit of account in ASC Topic 606. The Company's performance obligations include license rights, development services and services associated with regulatory submission and approval processes. Revenues from research services earned under collaboration agreements are generally recognized as revenue as the related services are provided. Revenues from non-refundable upfront fees are recognized over time either by measuring progress towards satisfaction of the relevant performance obligation, using the input method (i.e. cumulative actual costs incurred relative to total estimated costs) or on a straight-line basis when a performance obligation is expected to be satisfied evenly over a period of time (or when the entity has a stand-ready obligation). Significant management judgment is required to determine the level of effort required under an arrangement, and the period over which the Company expects to complete its performance obligations under the arrangement, which may include total internal personnel costs and external costs to be incurred as well as, in certain cases, the estimated stand-ready obligation period. Changes in these estimates can have a material effect on revenue recognized. If the Company cannot reasonably estimate when its performance obligations either are completed or become inconsequential, then revenue recognition is deferred until the Company can reasonably make such estimates. The Company includes the unconstrained amount of estimated variable consideration in the transaction price. The amount included in the transaction price is constrained to the amount for which it is probable that a significant reversal of cumulative revenue recognized will not occur. At the end of each subsequent reporting period, the Company re-evaluates the estimated variable consideration included in the transaction price and any related constraint and, if necessary, adjusts its estimate of the overall transaction price. Revenue is then recognized over the remaining estimated period of performance using the cumulative catch-up method. The estimated period of performance and project costs, such as personnel and manufacturing cost, are reviewed quarterly and adjusted, as needed, to reflect the Company's current assumptions regarding the timing of its deliverables.

As part of the accounting for these arrangements, the Company must develop assumptions that require judgment to determine the stand-alone selling price of each performance obligation identified in the contract. The Company uses key assumptions to determine the stand-alone selling price, which may include forecasted revenues, development timelines, reimbursement rates for personnel costs, discount rates and probabilities of technical and regulatory success. Related costs and expenses under these arrangements have historically approximated the revenues recognized.

Revenues from major collaboration agreements and research activity grants as a percentage of total revenues were as follows:

	Three Months Ended March 31,	
	2021	2020
Biogen MA, Inc.	40 %	—
Novartis Institutes for BioMedical Research, Inc.	30 %	—
Kite Pharma, Inc.	24 %	55 %
Sanofi Genzyme	4 %	4 %
Pfizer Inc.	—	27 %

Receivables from collaborations are typically unsecured and are concentrated in the biopharmaceutical industry. Accordingly, the Company may be exposed to credit risk generally associated with biopharmaceutical companies or specific to its collaboration agreements. As of March 31, 2021, the Company had not incurred any losses related to these receivables.

Funds received from the Company's collaboration partners are generally not refundable and are recorded as revenue as the Company fulfills its performance obligations, which are satisfied over time (i.e., stand ready obligations) or by using the input method (i.e., cumulative actual costs incurred relative to total estimated costs). Revenue is also recognized when the Company has incurred qualified research and development costs that are reimbursable from its collaboration partners and when there is reasonable assurance that such costs will be reimbursed. Any payments received from a collaboration partner in advance of the completion of the relevant performance obligation are recorded as deferred revenue.

Business Combinations

The Company accounts for acquisitions using the acquisition method of accounting, which requires that assets acquired, including in-process research and development ("IPR&D") projects, liabilities assumed and any non-controlling interests in the acquired target in an acquisition, be recorded at their fair values as of the acquisition date on the Company's Consolidated Balance Sheets. Any excess of purchase price over the fair value of net assets acquired is recorded as goodwill. The determination of fair value requires the Company to make significant estimates and assumptions. As a result, the Company may record adjustments to the fair values of assets acquired and liabilities assumed within the measurement period (up to one year from the acquisition date) with the corresponding offset to goodwill. Transaction costs associated with business combinations are expensed as they are incurred.

Goodwill and Intangible Assets

Goodwill represents the excess of the consideration transferred over the fair values of assets acquired and liabilities assumed in a business combination. Intangible assets with indefinite useful lives are related to purchased IPR&D projects and are measured at their respective fair values as of the acquisition date. Goodwill and intangible assets with indefinite useful lives are not amortized. Intangible assets related to IPR&D projects are considered to be indefinite-lived until the completion or abandonment of the associated research and development efforts. If and when development is complete, which generally occurs if and when regulatory approval to market a product is obtained, the associated assets would be deemed finite-lived and would then be amortized based on their respective estimated useful lives at that point in time. The Company tests goodwill and indefinite-lived intangible assets for impairment on an annual basis and between annual tests if the Company becomes aware of any events occurring or changes in circumstances that would indicate the fair values of the assets are below their respective carrying amounts. As of March 31, 2021, no impairment of goodwill or indefinite-lived intangible assets was identified.

Valuation of Long-Lived Assets

Long-lived assets, including property and equipment and finite-lived intangible assets, are reviewed for impairment whenever facts or circumstances either internally or externally may suggest that the carrying value of an asset may not be recoverable. Recoverability of these assets is measured by comparison of the carrying amount of each asset to the future undiscounted cash flows expected to result from the use of the asset and its eventual disposition. If the asset is considered to be impaired, the amount of any impairment is measured as the difference between the carrying value and the fair value of the impaired asset. As of March 31, 2021, no impairment of long-lived assets was identified.

Fair Value Measurements

The carrying amounts for financial instruments consisting of cash and cash equivalents, accounts receivable, accounts payable and other accrued liabilities approximate fair value due to their short maturities. Marketable securities are stated at their estimated fair values. The free shares asset or liability is measured using a binomial-lattice pricing model and is reviewed each reporting period and adjusted, as needed to approximate fair value.

Cash, Cash Equivalents and Restricted Cash

Sangamo considers all highly-liquid investments purchased with original maturities of three months or less at the purchase date to be cash equivalents. Cash and cash equivalents consist of cash and deposits in demand money market accounts. Restricted cash consists of a letter of credit for $1.5 million, representing a deposit for the lease of the corporate headquarters in Brisbane, California.

A reconciliation of cash, cash equivalents and restricted cash reported within the Condensed Consolidated Balance Sheets to the amounts reported within the accompanying Condensed Consolidated Statements of Cash Flows was as follows (in thousands):

	March 31, 2021	December 31, 2020	March 31, 2020	December 31, 2019
Cash and cash equivalents	$ 122,975	$ 131,329	$ 85,749	$ 80,428
Non-current restricted cash	1,500	1,500	1,500	1,500
Cash, cash equivalents and restricted cash as reported within the accompanying Condensed Consolidated Statements of Cash Flows	$ 124,475	$ 132,829	$ 87,249	$ 81,928

Marketable Securities

Sangamo classifies its marketable securities as available-for-sale and records its investments at estimated fair value based on quoted market prices or observable market inputs of almost identical assets, with the unrealized holding gains and losses included in accumulated other comprehensive income (“AOCI”). The Company classifies those investments that are not required for use in current operations and that mature in more than 12 months as non-current marketable securities in the accompanying Condensed Consolidated Balance Sheets.

The Company’s investments are subject to a periodic impairment review. The Company recognizes an impairment charge, if material, when a decline in the fair value of its investments below the cost basis is judged to be other-than-temporary. The Company considers various factors in determining whether to recognize an impairment charge, including the length of time and extent to which the fair value has been less than the Company’s cost basis, the financial condition and near-term prospects of the investee and the Company’s intent and ability to hold the investment for a period of time sufficient to allow for any anticipated recovery in the market value. Realized gains and losses on marketable securities are included in interest and other income, net, which are determined using the specific identification method.

Concentrations of Credit Risk and Other Risks

Cash, cash equivalents, and marketable securities consist of financial instruments that potentially subject the Company to a concentration of credit risk to the extent of the fair value recorded in the Condensed Consolidated Balance Sheets. The Company invests cash that is not required for immediate operating needs primarily in highly liquid instruments that bear minimal risk. The Company has established policies relating to the quality, diversification, and maturities of securities to enable the Company to manage its credit risk. The Company is exposed to credit risk in the event of a default by the financial institutions holding its cash, cash equivalents and investments and issuers of investments to the extent recorded on the Condensed Consolidated Balance Sheets.

Certain materials and key components that the Company utilizes in its operations are obtained through single suppliers. Since the suppliers of key components and materials must be named in an investigational new drug application (“IND”) filed with the U.S. Food and Drug Administration for a product, significant delays can occur if the qualification of a new supplier is required. If delivery of material from the Company’s suppliers were interrupted for any reason, the Company may be unable to supply any of its product candidates for clinical trials.

Leases

The Company determines if an arrangement is or contains a lease at inception by assessing whether the arrangement contains an identified asset and whether it has the right to control the identified asset. Right-of-use (“ROU”) assets represent the Company’s right to use an underlying asset for the lease term and lease liabilities represent the Company’s obligation to make lease payments arising from the lease. Lease liabilities are recognized at the lease commencement date based on the present value of future lease payments over the lease term. ROU assets are based on the measurement of the lease liability and also include any lease payments made prior to or on lease commencement and exclude lease incentives and initial direct costs incurred, as applicable.

As the implicit rate in the Company’s leases is generally unknown, the Company uses its incremental borrowing rate based on the information available at the lease commencement date in determining the present value of remaining lease payments. The incremental borrowing rate represents an estimate of the interest rate the Company would incur at lease commencement to

borrow an amount equal to the lease payments on a collateralized basis over the term of a lease in a similar economic environment. The Company considers its credit risk, term of the lease, and total lease payments and adjusts for the impacts of collateral, as necessary, when calculating its incremental borrowing rates. The lease terms may include options to extend or terminate the lease when it is reasonably certain the Company will exercise any such options. Rent expense for the Company's operating leases is recognized on a straight-line basis over the lease term.

The Company has elected to not separate lease and non-lease components for its real estate and copier leases and, as a result, accounts for any lease and non-lease components as a single lease component. The Company has also elected to not apply the recognition requirement to any leases with a term of 12 months or less and does not include an option to purchase the underlying asset that the Company is reasonably certain to exercise.

Foreign Currency Translation

The functional currency of the Company's foreign subsidiaries is primarily the Euro. Assets and liabilities denominated in foreign currencies are translated to U.S. dollars using the exchange rates at the balance sheet date. Foreign currency translation adjustments are recorded as a component of AOCI within stockholders' equity. Revenues and expenses from the Company's foreign subsidiaries are translated using the monthly average exchange rates in effect during the period in which the transactions occur. Foreign currency transaction gains and losses are recorded in interest and other income, net, on the Company's Condensed Consolidated Statements of Operations.

Recently Adopted Accounting Pronouncements

None.

NOTE 2—FAIR VALUE MEASUREMENTS

The Company measures certain financial assets and liabilities at fair value on a recurring basis, including cash equivalents, marketable securities and the free shares asset. Fair value is determined based on a three-tier hierarchy under the authoritative guidance for fair value measurements and disclosures that prioritizes the inputs used in measuring fair value as follows:

Level 1: Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities;

Level 2: Quoted prices in markets that are not active or inputs which are observable, either directly or indirectly, for substantially the full term of the asset or liability; and

Level 3: Prices or valuation techniques that require inputs that are both significant to the fair value measurements and unobservable (i.e., supported by little or no market activity).

The fair value measurements of the Company's cash equivalents, marketable securities and the free shares asset are identified at the following levels within the fair value hierarchy (in thousands):

	March 31, 2021			
	Fair Value Measurements			
	Total	Level 1	Level 2	Level 3
Assets:				
Cash equivalents:				
Money market funds	$ 47,635	$ 47,635	$ —	$ —
Total	47,635	47,635	—	—
Marketable securities:				
Commercial paper securities	177,154	—	177,154	—
Corporate debt securities	39,022	—	39,022	—
Certificates of deposit	11,494	—	11,494	—
Asset-backed securities	36,410	—	36,410	—
U.S. government-sponsored entity debt securities	242,460	—	242,460	—
Total	506,540	—	506,540	—
Total cash equivalents and marketable securities	$ 554,175	$ 47,635	$ 506,540	$ —
Free shares asset	$ 38	$ —	$ —	$ 38

	December 31, 2020			
	Fair Value Measurements			
	Total	Level 1	Level 2	Level 3
Assets:				
Cash equivalents:				
Money market funds	$ 53,165	$ 53,165	$ —	$ —
Total	53,165	53,165	—	—
Marketable securities:				
Commercial paper securities	213,533	—	213,533	—
Corporate debt securities	59,574	—	59,574	—
Certificate of deposits	12,311	—	12,311	—
Asset-backed securities	17,908	—	17,908	—
U.S. government-sponsored entity debt securities	257,298	—	257,298	—
Total	560,624	—	560,624	—
Total cash equivalents and marketable securities	$ 613,789	$ 53,165	$ 560,624	$ —
Free shares asset	$ 70	$ —	$ —	$ 70

Cash Equivalents and Marketable Securities

The Company generally classifies its marketable securities and some cash equivalents as Level 2. Instruments are classified as Level 2 when observable market prices for identical securities that are traded in less active markets are used. When observable market prices for identical securities are not available, such instruments are priced using benchmark curves, benchmarking of like securities, sector groupings, matrix pricing and valuation models. These valuation models are proprietary to the pricing providers or brokers and incorporate a number of inputs, including in approximate order of priority: benchmark yields, reported trades, broker/dealer quotes, issuer spreads, two-sided markets, benchmark securities, bids, offers and reference data including market research publications. For certain security types, additional inputs may be used, or some of the standard inputs may not be applicable. Evaluators may prioritize inputs differently on any given day for any security based on market conditions, and not all inputs listed are available for use in the evaluation process for each security evaluation on any given day.

Free Shares Asset

As a result of the July 20, 2018 Share Purchase Agreement ("Sangamo France SPA") to acquire Sangamo France (see Note 10 — Acquisition of Sangamo Therapeutics France S.A.S.), the Company entered into arrangements with the holders of approximately 477,000 "free shares" of Sangamo France pursuant to which the Company has the right to purchase such shares from the holders (a call option) and such holders have the right to sell to the Company such shares from time to time through mid-2021 (a put option). As of March 31, 2021, the Company purchased approximately 453,000 shares of the 477,000 total free shares, for a cash payment of approximately $1.1 million, upon exercise of the put options. As of March 31, 2021, approximately 24,000 free shares remain outstanding and subject to purchase by the Company. The fair value of the free shares' asset is immaterial at March 31, 2021 and December 31, 2020.

Free Shares valuation assumptions	March 31, 2021	December 31, 2020
Sangamo stock price (USD)	$ 11.83	$ 15.61
Sangamo France stock price (EUR)	€ 2.92	€ 3.85
EUR / USD exchange rate	0.84	0.82
Estimated correlation between Sangamo and Sangamo France stock prices	100.0 %	100.0 %
Sangamo stock price (USD) volatility estimate	91.3 %	88.9 %
Sangamo France stock price (EUR) volatility estimate	91.3 %	88.9 %
EUR / USD exchange rate volatility estimate	6.3 %	6.3 %
Risk free rate and cost of debt by expected exercise date	Varies	Varies

NOTE 3—CASH EQUIVALENTS AND MARKETABLE SECURITIES

The table below summarizes the Company's cash equivalents and marketable securities (in thousands):

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized (Losses)	Estimated Fair Value
March 31, 2021				
Assets				
Cash equivalents:				
Money market funds	$ 47,635	$ —	$ —	$ 47,635
Total	47,635	—	—	47,635
Marketable securities:				
Commercial paper securities	177,101	53	—	177,154
Corporate debt securities	39,031	5	(14)	39,022
Certificate of deposits	11,495	—	(1)	11,494
Asset-backed securities	36,419	7	(16)	36,410
U.S. government-sponsored entity debt securities	242,401	59	—	242,460
Total	506,447	124	(31)	506,540
Total cash equivalents and marketable securities	$ 554,082	$ 124	$ (31)	$ 554,175
December 31, 2020				
Assets				
Cash equivalents:				
Money market funds	$ 53,165	$ —	$ —	$ 53,165
Total	53,165	—	—	53,165
Marketable securities:				
Commercial paper securities	213,500	41	(8)	213,533
Corporate debt securities	59,575	16	(17)	59,574
Certificate of deposits	12,311	—	—	12,311
Asset-backed securities	17,905	10	(7)	17,908
U.S. government-sponsored entity debt securities	257,284	19	(5)	257,298
Total	560,575	86	(37)	560,624
Total cash equivalents and marketable securities	$ 613,740	$ 86	$ (37)	$ 613,789

The fair value of marketable securities by contractual maturity were as follows (in thousands):

	March 31, 2021	December 31, 2020
Maturing in one year or less	$ 464,109	$ 510,094
Maturing after one year through five years	42,431	50,530
Total	$ 506,540	$ 560,624

The Company manages credit risk associated with its investment portfolio through its investment policy, which limits purchases to high-quality issuers and also limits the amount of its portfolio that can be invested in a single issuer. The Company did not record an allowance for credit losses or other impairment charges related to its marketable securities for the three months ended March 31, 2021 and 2020.

The Company had unrealized losses related to its marketable securities for the three months ended March 31, 2021 and 2020. These unrealized losses were not attributed to credit risk and were associated with changes in market conditions. The Company periodically reviews the marketable securities for other-than-temporary impairment losses. The Company considers factors such as the duration, the magnitude and the reason for the decline in value, the potential recovery period, creditworthiness of the issuers of the securities and its intent to sell. For marketable securities, it also considers whether (i) it is more likely than

not that the Company will be required to sell the debt securities before recovery of their amortized cost basis, and (ii) the amortized cost basis cannot be recovered as a result of credit losses. No significant facts or circumstances have arisen to indicate that there has been any significant deterioration in the creditworthiness of the issuers of the securities held by the Company. Based on the Company's review of these securities, including the assessment of the duration and severity of the unrealized losses and the Company's ability and intent to hold the investments until maturity, there were no other-than-temporary impairments for these marketable securities at either March 31, 2021 or December 31, 2020.

NOTE 4—BASIC AND DILUTED NET LOSS PER SHARE

Basic net loss per share attributable to Sangamo Therapeutics, Inc. stockholders has been computed by dividing net loss attributable to Sangamo Therapeutics, Inc. stockholders by the weighted-average number of shares of common stock outstanding during the period. Diluted net loss per share attributable to Sangamo Therapeutics, Inc. stockholders is calculated by dividing net loss attributable to Sangamo Therapeutics, Inc. stockholders by the weighted-average number of shares of common stock and potential dilutive securities outstanding during the period.

The total number of shares subject to stock options and restricted stock units ("RSUs") outstanding and the employee stock purchase plan ("ESPP") shares reserved for issuance, which are all anti-dilutive, were excluded from consideration in the calculation of diluted net loss per share attributable to Sangamo Therapeutics, Inc. stockholders. Stock options and RSUs outstanding and ESPP shares reserved for issuance as of March 31, 2021 and 2020 totaled 17,614,376 and 14,849,728, respectively.

NOTE 5—MAJOR CUSTOMERS, PARTNERSHIPS AND STRATEGIC ALLIANCES

Novartis Institutes for BioMedical Research, Inc.

On July 27, 2020, the Company entered into a collaboration and license agreement with Novartis Institutes for BioMedical Research, Inc. ("Novartis") for the research, development and commercialization of gene regulation therapies to treat three neurodevelopmental disorders. Under the agreement, which was effective upon execution, the Company granted Novartis an exclusive, royalty bearing and worldwide license, under its relevant patents and know-how, to develop, manufacture and commercialize certain of its zinc finger protein ("ZFP") transcription factors ("ZFP-TFs") targeted to three undisclosed genes that are associated with certain neurodevelopmental disorders, including autism spectrum disorder and intellectual disability. The Company will perform early research activities over the collaboration period for each gene target and manufacture the ZPF-TFs required for such research, costs of which will be funded by Novartis. Novartis is responsible for additional research activities, IND-enabling studies, clinical development, regulatory approvals, manufacturing of preclinical, clinical and approved products, and global commercialization. Subject to certain exceptions set forth in the agreement, the Company is prohibited from developing, manufacturing or commercializing any therapeutic product targeting any of the three genes that are the subject of the collaboration. Novartis also has the option to license certain of the Company's proprietary adeno-associated viruses ("AAVs") for the sole purpose of developing, manufacturing and commercializing licensed products arising from the collaboration.

Under the agreement, Novartis paid the Company a $75.0 million upfront license fee in August 2020. In addition to this fee and the cost reimbursements for early research activities, the Company is eligible to earn from Novartis up to $420.0 million in development milestones and up to $300.0 million in commercial milestones. The Company is also eligible to earn from Novartis tiered high single-digit to sub-teen double-digit royalties on potential net commercial sales of licensed products arising from the collaboration. These royalty payments will be subject to reduction due to patent expiration, loss of market exclusivity and payments made under certain licenses for third-party intellectual property. The agreement will continue, on a product-by-product and country-by-country basis, until the expiration of the applicable royalty term. Novartis has the right to terminate the agreement, in its entirety or on a target-by-target basis, for any reason after a specified notice period. Each party also has the right to terminate the agreement on account of the other party's bankruptcy or material, uncured breach.

All payments received under the agreement, when earned are non-refundable and non-creditable. The transaction price of $95.1 million includes the upfront license fee of $75.0 million and estimated research costs of $20.1 million to be provided over the estimated research period. All clinical or regulatory milestone amounts were considered fully constrained at inception of the agreement. As part of its evaluation of the constraint, the Company considered numerous factors, including the fact that achievement of the milestones at this time is uncertain and contingent upon future periods when the uncertainty related to the variable consideration is resolved. The Company will re-evaluate the transaction price, including the estimated variable consideration included in the transaction price and all constrained amounts, in each reporting period and as uncertain events are resolved or other changes in circumstances occur.

The Company assessed the agreement with Novartis in accordance with ASC Topic 606 and concluded that Novartis is a customer. The Company has identified a single performance obligation within this arrangement as a license to the technology and ongoing research services. The Company concluded that the license is not discrete as it does not have stand-alone value to Novartis apart from the research services to be performed pursuant to the agreement. As a result, the Company recognizes revenue from the upfront payment based on proportional performance of the ongoing research services through the estimated research period. The estimation of progress towards the satisfaction of performance obligation and project cost is reviewed quarterly and adjusted, as needed, to reflect the Company's current assumptions regarding the timing of its performance obligation. As of March 31, 2021, and December 31, 2020, the Company had deferred revenue of $64.7 million and $70.9 million, respectively, related to this agreement.

For the three months ended March 31, 2021 and 2020, the Company recognized revenue of approximately $6.2 million and none, respectively, related to the upfront license fee and approximately $1.7 million and none, respectively, from research reimbursement costs related to the Novartis agreement.

The Company paid $1.5 million for financial advisory fees during the year ended December 31, 2020, equal to 2% of $75.0 million received for the upfront license fee related to the collaboration and license agreement with Novartis. The Company recognized $1.5 million as a contract asset as such amount represents a cost of obtaining the agreement. This balance will be amortized and included in general and administrative expenses on a systematic basis consistent with the transfer of the services to Novartis in accordance with ASC Topic 340, *Other Assets and Deferred Costs*. The Company amortized $0.1 million and none during the three months ended March 31, 2021 and 2020, respectively.

Biogen MA, Inc.

In February 2020, the Company entered into a collaboration and license agreement with Biogen MA, Inc. ("BIMA") and Biogen International GmbH (together with BIMA, "Biogen") for the research, development and commercialization of gene regulation therapies for the treatment of neurological diseases. The companies plan to leverage the Company's proprietary ZFP technology delivered via AAV to modulate expression of key genes involved in neurological diseases. Concurrently with the execution of the collaboration agreement, the Company entered into a stock purchase agreement with BIMA, pursuant to which BIMA agreed to purchase 24,420,157 shares of the Company's common stock (the "Biogen Shares"), at a price per share of $9.2137, for an aggregate purchase price of approximately $225.0 million.

The collaboration agreement became effective in April 2020 following the termination of the waiting period under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended, and satisfaction of other customary closing conditions, including the payment of $225.0 million for the purchase of the Biogen Shares.

Under the collaboration agreement, Biogen paid the Company an upfront license fee of $125.0 million in May 2020. The Company is also eligible to receive research, development, regulatory and commercial milestone payments that could total up to approximately $2.37 billion if Biogen selects all of the targets allowed under the agreement and all the specified milestones set forth in the agreement are achieved, which includes up to $925.0 million in pre-approval milestone payments and up to $1.45 billion in first commercial sale and other sales-based milestone payments. In addition, the Company is also eligible to receive tiered high single-digit to sub-teen royalties on potential net commercial sales of licensed products arising from the collaboration. These royalty payments are subject to reduction due to patent expiration, entry of biosimilar products to the market and payments made under certain licenses for third-party intellectual property.

Under the collaboration agreement, the Company granted to Biogen an exclusive, royalty bearing and worldwide license, under its relevant patents and know-how, to develop, manufacture and commercialize certain ZFP and/or AAV-based products directed to up to 12 neurological disease gene targets selected by Biogen. Biogen has already selected three of these: ST-501 for tauopathies including Alzheimer's disease, ST-502 for synucleinopathies including Parkinson's disease, and a third undisclosed neuromuscular disease target. Biogen has exclusive rights to nominate up to nine additional targets over a target selection period of five years. For each gene target selected by Biogen, the Company performs early research activities, costs for which are shared by the companies, aimed at the development of the combination of proprietary central nervous system delivery vectors and ZFP-TFs (or potential other ZFP products) targeting therapeutically relevant genes. Biogen has assumed responsibility and costs for the IND-enabling studies, clinical development, related regulatory interactions, and global commercialization. The Company is responsible for manufacturing activities for the initial clinical trials for the first three products of the collaboration and plans to leverage its in-house manufacturing capacity, where appropriate, which is currently in development. Biogen is responsible for manufacturing activities beyond the first clinical trial for each of the first three products. The Company's research activities for any targets will be performed over the period not to exceed seven years from the effective date of the agreement (i.e. through April 2027). Subject to certain exceptions set forth in the collaboration agreement, the Company is prohibited from developing, manufacturing or commercializing any therapeutic product directed to the targets selected by Biogen.

The collaboration agreement continues on a product-by-product and country-by-country basis until the expiration of all applicable royalty terms. Biogen has the right to terminate the collaboration agreement, in its entirety or on target-by-target basis, for any reason after a specified notice period, and also has the right to replace up to ten targets. Each party has the right to terminate this agreement on account of the other party's bankruptcy or material, uncured breach. In addition, the Company may terminate the collaboration agreement if Biogen challenges any patents licensed by the Company to Biogen.

Pursuant to the terms of the stock purchase agreement, Biogen has agreed not to, without the Company's prior written consent and subject to specified conditions and exceptions, directly or indirectly acquire shares of the Company's outstanding common stock, seek or propose a tender or exchange offer or merger between the parties, solicit proxies or consents with respect to any matter, or undertake other specified actions related to the potential acquisition of additional equity interests in the Company. Such standstill restrictions expire on the earlier of the three-year anniversary of the effectiveness of the collaboration agreement and the date that Biogen beneficially owns less than 5% of the Company's common stock.

The stock purchase agreement also provides that from the first anniversary of the effectiveness of the collaboration agreement, through the second anniversary, Biogen will hold and not sell at least 50% of the Biogen Shares, in addition to being subject to certain volume limitations. The stock purchase agreement further provides that, subject to certain limitations, until such time as all remaining Biogen Shares may be sold pursuant to Rule 144 promulgated under the Securities Exchange Act of 1933, as amended, within a 90-day period, Biogen may request the Company to register for resale any of the Biogen Shares on a registration statement to be filed with the SEC.

In addition, Biogen has agreed that, excluding specified extraordinary matters, it will vote the Biogen Shares in accordance with the Company's recommendation and has granted the Company an irrevocable proxy with respect to the foregoing. Such voting provisions expire on the earlier of (i) the two-year anniversary of the effectiveness of the collaboration agreement, (ii) the date that Biogen beneficially owns less than 5% of the Company's common stock and (iii) the date the collaboration agreement is terminated; provided, however, that in no event shall such expiration date be prior to the one-year anniversary of the effectiveness of the collaboration agreement.

The Company assessed the collaboration agreement with Biogen in accordance with ASC Topic 606 and concluded that Biogen is a customer. The transaction price of $204.6 million includes the upfront license fee of $125.0 million and the excess consideration from the stock purchase of $79.6 million, which represents the difference between the $225.0 million received for the purchase of the Biogen Shares and the $145.4 million estimated fair value of the equity issued. The equity issued to Biogen was valued using an option pricing model to reflect certain holding period restrictions. None of the target selection fees and clinical or regulatory milestones have been included in the transaction price, as all such amounts are fully constrained. As part of its evaluation of the constraint, the Company considered numerous factors, including the fact that nomination of additional targets and achievement of the milestones at this time is uncertain and contingent upon future periods when the uncertainty related to the variable consideration is resolved. The Company will re-evaluate the transaction price as uncertain events are resolved or other changes in circumstances occur.

The Company has identified a single performance obligation within the Biogen collaboration agreement, which is a stand-ready obligation consisting of a series of distinct days of research services, during which Biogen obtains access to the Company's license and research resources. Revenue from the upfront license fee relates to access to the license and Company's obligation to stand-ready to perform such research services corresponding to the targets selected by Biogen. As a result of this obligation to perform research services when and if requested throughout the duration of the contract, the upfront license fee and the excess consideration from the stock purchase will be recognized over time on a straight-line basis consistent with the resources expected to be dedicated to providing the research services through April 2027, the estimated period of the obligation. The estimated period of performance is reviewed quarterly and adjusted, as needed, to reflect the Company's current assumptions regarding the timing of its deliverable. Revenue from the reimbursement by Biogen of shared costs of early research activities performed by Sangamo is recognized as the research services are performed. As of March 31, 2021, and December 31, 2020, the Company had deferred revenue of $175.9 million and $183.2 million, respectively, related to this agreement.

For the three months ended March 31, 2021 and 2020, the Company recognized revenue of approximately $7.3 million and none, respectively, related to the upfront license fee and the excess consideration from the stock purchase, and approximately $3.1 million and none, respectively, from research reimbursement costs under the Biogen agreement.

The Company paid $7.0 million for financial advisory fees during the year ended December 31, 2020, equal to 2% of $225.0 million received for the sale of shares and 2% of $125.0 million received for the upfront fee. The fees incurred related to both the collaboration agreement with Biogen and to the stock purchase agreement for the sale of shares. The Company believes that the allocation of fees on a relative fair value basis between the two agreements is reasonable. The Company recognized $4.1 million, which represents 2% of the transaction price of $204.6 million, as a contract asset. This balance will be amortized and included in general and administrative expenses on a systematic basis consistent with the transfer of the services to Biogen in accordance with ASC Topic 340, *Other Assets and Deferred Costs*. The Company amortized $0.1 million and none during the three months ended March 31, 2021 and 2020, respectively. The Company recognized $2.9 million, which represents 2% of the $145.4 million estimated fair value of the equity issued, as a share issuance cost and recorded this amount in equity as a reduction in proceeds.

Kite Pharma, Inc.

In February 2018, the Company entered into a global collaboration and license agreement with Kite Pharma, Inc. ("Kite"), which became effective in April 2018, and was amended and restated in September 2019, for the research, development and commercialization of potential engineered cell therapies for cancer. In this collaboration, Sangamo is working together with Kite on a research program under which the companies are designing zinc finger nucleases ("ZFNs") and viral vectors to disrupt and insert certain genes in T-cells and natural killer cells ("NK-cells") including the insertion of genes that encode chimeric antigen receptors ("CARs"), T-cell receptors ("TCRs"), and NK-cell receptors ("NKRs") directed to mutually agreed targets. Kite is responsible for all clinical development, manufacturing and commercialization of any resulting products.

Subject to the terms of this agreement, the Company granted Kite an exclusive, royalty-bearing, worldwide sublicensable license under the Company's relevant patents and know-how to develop, manufacture and commercialize, for the purpose of treating cancer, specific cell therapy products that may result from the research program and that are engineered *ex vivo* using selected ZFNs and viral vectors developed under the research program to express CARs, TCRs or NKRs directed to candidate targets.

During the research program term and subject to certain exceptions except pursuant to this agreement, the Company is prohibited from researching, developing, manufacturing and commercializing, for the purpose of treating cancer, any cell therapy product that, as a result of *ex vivo* genome editing, expresses a CAR, TCR or NKR that is directed to a target expressed on or in a human cancer cell. After the research program term concludes and subject to certain exceptions, except pursuant to this agreement, the Company will be prohibited from developing, manufacturing and commercializing, for the purpose of treating cancer, any cell therapy product that, as a result of *ex vivo* genome editing, expresses a CAR, TCR or NKR that is directed to a candidate target.

Following the effective date, the Company received a $150.0 million upfront payment from Kite. Kite reimburses the Company's direct costs to conduct the joint research program. Sangamo is also eligible to receive contingent development- and sales-based milestone payments that could total up to $3.01 billion if all of the specified milestones set forth in this agreement are achieved. Of this amount, approximately $1.26 billion relates to the achievement of specified research, clinical development, regulatory and first commercial sale milestones, and approximately $1.75 billion relates to the achievement of specified sales-based milestones if annual worldwide net sales of licensed products reach specified levels. Each development- and sales-based milestone payment is payable (i) only once for each licensed product regardless of the number of times that the associated milestone event is achieved by such licensed product, and (ii) only for the first ten times that the associated milestone event is achieved regardless of the number of licensed products that may achieve such milestone event. In addition, the Company is entitled to receive escalating, tiered royalty payments with a percentage in the single digits based on future annual worldwide net sales of licensed products. These royalty payments are subject to reduction due to patent expiration, entry of biosimilar products to the market and payments made under certain licenses for third-party intellectual property.

The initial research term in the agreement is six years. Kite has an option to extend the research term of the agreement for up to two additional one-year periods for a separate upfront fee of $10.0 million per year. All contingent payments under the agreement, when earned, will be non-refundable and non-creditable. In connection with the amendment and restatement of the agreement in September 2019, the Company entered into a new research plan with Kite, with estimated reimbursable service cost of approximately $3.4 million, which is included in the total estimated reimbursable service costs. The Company concluded the total transaction price under this agreement is $189.3 million and includes the upfront license fee of $150.0 million and $39.3 million estimated reimbursable service costs for identified research projects over the estimated performance period. Further, the Company concluded the estimated fees for the presumed exercise of the research term extension options and all milestone amounts are fully constrained. As part of its evaluation of the constraint, the Company considered numerous factors, including the fact that achievement of the milestones at this time is uncertain and contingent upon future events which are uncertain at this time. The Company will re-evaluate the transaction price including the estimated variable consideration included in the transaction price and all constrained amounts in each reporting period and as uncertain events are resolved or other changes in circumstances occur. None of the development and sales-based milestone payments have been included in the transaction price.

The Company assessed the agreement with Kite in accordance with ASC Topic 606 and concluded that Kite is a customer. Kite has the right to terminate this agreement in its entirety or on a per licensed product or per candidate target basis for any reason after a specified notice period. Each party has the right to terminate this agreement on account of the other party's bankruptcy or material, uncured breach.

The Company has identified the primary performance obligations within the Kite agreement as: (1) a license to the technology along with the stand-ready obligation to perform research services, and (2) the ongoing research services. Revenue from the upfront license fee relates to access to the license and Company's obligation to stand-ready to perform such research services as additional targets are selected by Kite. As a result of this obligation to perform research services when and if requested throughout the duration of the contract, the fee for the license and the stand-ready obligation will be recognized over time on a straight-line basis through June 2024, the estimated period of the stand-ready obligation. Revenue from the reimbursable costs related to the integrated service deliverable is recognized as the research services are performed. Related costs and expenses under these arrangements have historically approximated the revenues recognized. The estimated period of performance and project cost is reviewed quarterly and adjusted, as needed, to reflect the Company's current assumptions regarding the timing of its deliverables. As of March 31, 2021, and December 31, 2020, the Company had deferred revenue of $75.3 million and $81.4 million, respectively, related to this agreement.

Revenues recognized under the agreement for the three months ended March 31, 2021 and 2020 were as follows (in thousands):

	Three Months Ended March 31,	
	2021	2020
Revenue related to Kite agreement:		
Recognition of license and stand-ready fee	$ 6,159	$ 6,227
Research services	129	992
Total	$ 6,288	$ 7,219

Pfizer Inc.

Giroctocogene Fitelparvovec Global Collaboration and License Agreement

In May 2017, the Company entered into an exclusive global collaboration and license agreement with Pfizer, pursuant to which it established a collaboration for the research, development and commercialization of giroctocogene fitelparvovec, its gene therapy product candidate for hemophilia A, and closely related products.

Under this agreement, the Company is responsible for conducting the Phase 1/2 clinical trial and for certain manufacturing activities for giroctocogene fitelparvovec, while Pfizer is responsible for subsequent worldwide development, manufacturing, marketing and commercialization of giroctocogene fitelparvovec. Sangamo may also collaborate in the research and development of additional AAV-based gene therapy products for hemophilia A.

Subject to the terms of the agreement, the Company granted Pfizer an exclusive worldwide royalty-bearing license, with the right to grant sublicenses, to use certain technology controlled by the Company for the purpose of developing, manufacturing and commercializing giroctocogene fitelparvovec and related products. Pfizer granted the Company a non-exclusive, worldwide, royalty free, fully paid license, with the right to grant sublicenses, to use certain manufacturing technology developed under the agreement and controlled by Pfizer to manufacture the Company's products that utilize the AAV delivery system. During a specified period, neither the Company nor Pfizer is permitted to clinically develop or commercialize, outside of the collaboration, certain AAV-based gene therapy products for hemophilia A.

Unless earlier terminated, the agreement has a term that continues on a per product and per country basis until the later of (i) the expiration of patent claims that cover the product in a country, (ii) the expiration of regulatory exclusivity for a product in a country, and (iii) fifteen years after the first commercial sale of a product in a country. Pfizer has the right to terminate the agreement without cause in its entirety or on a per product or per country basis. The agreement may also be terminated by either party based on an uncured material breach by the other party or the bankruptcy of the other party. Upon termination for any reason, the license granted by the Company to Pfizer to develop, manufacture and commercialize giroctocogene fitelparvovec and related products will automatically terminate. Upon termination by the Company for cause or by Pfizer in any country or countries, Pfizer will automatically grant the Company an exclusive, royalty-bearing license under certain technology controlled by Pfizer to develop, manufacture and commercialize giroctocogene fitelparvovec in the terminated country or countries.

Upon execution of the agreement, the Company received an upfront fee of $70.0 million and is eligible to receive up to $208.5 million in payments upon the achievement of specified clinical development, intellectual property and regulatory milestones and up to $266.5 million in payments upon first commercial sale milestones for giroctocogene fitelparvovec and potentially other products. The total amount of potential clinical development, intellectual property, regulatory and first commercial sale milestone payments, assuming the achievement of all specified milestones in the agreement, is up to $475.0 million, which includes up to $300.0 million for giroctocogene fitelparvovec and up to $175.0 million for other products that may be developed under the agreement, subject to reduction on account of payments made under certain licenses for third-party intellectual property. In addition, Pfizer agreed to pay the Company royalties for each potential licensed product developed under the agreement that are an escalating tiered, double-digit percentage of the annual net sales of such product and are subject to reduction due to patent expiration, entry of biosimilar products to the market and payment made under certain licenses for third-party intellectual property. To date, two milestones of $55.0 million in aggregate have been achieved and paid, however no products have been approved and therefore no royalty fees have been earned under the agreement.

The Company assessed the agreement with Pfizer in accordance with ASC Topic 606 and concluded that Pfizer is a customer. The total transaction price under this agreement is $134.0 million, which represents the upfront fee and research services fees of $79.0 million and two unconstrained milestones achieved of an aggregate amount of $55.0 million. Sangamo is responsible for internal and external research costs as part of the upfront fee and has the ability to request additional reimbursement from Pfizer if certain conditions are met. None of the constrained clinical or regulatory milestones have been included in the transaction price. As part of its evaluation of the constraint, the Company considered numerous factors, including the fact that achievement of the milestones at this time is uncertain and contingent upon future periods when the uncertainty

related to the variable consideration is resolved. The Company will re-evaluate the transaction price, including its estimated variable consideration included in the transaction price and all constrained amounts in each reporting period and as uncertain events are resolved or other changes in circumstances occur.

The Company has identified the performance obligations within the agreement as a license to the technology and ongoing research services. The Company concluded that the license is not discrete as it does not have stand-alone value to Pfizer apart from the research services to be performed by the Company pursuant to the agreement. As a result, the Company recognized revenue from the upfront payment based on proportional performance of the ongoing research services through 2020, the period the Company performed research services. The estimation of progress towards the satisfaction of its performance obligation and project cost is reviewed quarterly and adjusted, as needed, to reflect the Company's current assumptions regarding the timing of its deliverables.

In December 2019, the Company entered into an amendment to the agreement, pursuant to which the Company transferred the IND for giroctocogene fitelparvovec to Pfizer. Upon this transfer the Company achieved a $25.0 million milestone as the conditions for achieving the milestone were met. The cumulative revenue recognized in connection with this milestone was $25.0 million during the year ended December 31, 2020.

In March 2020, the Company recorded an adjustment to revenue related to a change in estimate in connection with the hemophilia A collaboration agreement with Pfizer. This adjustment was a direct result of the decision to decrease the project scope and the corresponding costs, after the successful IND transfer of the giroctocogene fitelparvovec product candidate to Pfizer, both of which resulted in an increase in the measure of proportional cumulative performance. This adjustment increased revenue by $2.4 million, decreased net loss by $2.4 million and decreased the Company's basic net loss per share by $0.02 for the three months ended March 31, 2020.

In September 2020, the Company determined that there was a high probability of achievement of a $30.0 million milestone with Pfizer for giroctocogene fitelparvovec. The milestone was subsequently achieved upon dosing of the first subject in a Phase 3 clinical trial in early October 2020. The cumulative revenue recognized in connection with this milestone was $30.0 million during the year ended December 31, 2020.

In December 2020, the Company satisfied the deliverables and research services responsibilities within the arrangement. As a result, the Company recognized the remaining deferred revenue from the upfront payment in December 2020 and no revenues have been recognized during the three months ended March 31, 2021. The Company recognized $2.2 million of upfront license fee and research services and $1.0 million milestone achievement as revenue related to this agreement during the three months ended March 31, 2020.

C9ORF72 Research Collaboration and License Agreement

In December 2017, the Company entered into a separate exclusive, global collaboration and license agreement with Pfizer for the development and commercialization of potential gene therapy products that use ZFP-TFs to treat amyotrophic lateral sclerosis ("ALS") and frontotemporal lobar degeneration linked to mutations of the *C9ORF72* gene. Pursuant to this agreement, the Company agreed to work with Pfizer on a research program to identify, characterize and preclinically develop ZFP-TFs that bind to and specifically reduce expression of the mutant form of the *C9ORF72* gene.

Subject to the terms of this agreement, the Company granted Pfizer an exclusive, royalty-bearing, worldwide license under the Company's relevant patents and know-how to develop, manufacture and commercialize gene therapy products that use resulting ZFP-TFs that satisfy pre-agreed criteria. During a specified period, neither the Company nor Pfizer will be permitted to research, develop, manufacture or commercialize outside of the collaboration any ZFPs that specifically bind to the *C9ORF72* gene.

Unless earlier terminated, the agreement has a term that continues on a per licensed product and per country basis until the later of (i) the expiration of patent claims that cover the licensed product in a country, (ii) the expiration of regulatory exclusivity for a licensed product in a country, and (iii) fifteen years after the first commercial sale of a licensed product in a major market country. Pfizer also has the right to terminate the agreement without cause in its entirety or on a per product or per country basis. The agreement may also be terminated by either party based on an uncured material breach by the other party or the bankruptcy of the other party. The agreement will also terminate if the Company is unable to identify any lead candidates for development within a specified period of time or if Pfizer elects not to advance a lead candidate beyond a certain development milestone within a specified period of time. Upon termination for any reason, the license granted by the Company to Pfizer to develop, manufacture and commercialize licensed products under the agreement will automatically terminate. Upon termination by the Company for cause or by Pfizer without cause for any licensed product or licensed products in any country or countries, the Company will have the right to negotiate with Pfizer to obtain a non-exclusive, royalty-bearing license under certain technology controlled by Pfizer to develop, manufacture and commercialize the licensed product or licensed products in the terminated country or countries.

Following termination by the Company for Pfizer's material breach, Pfizer will not be permitted to research, develop, manufacture or commercialize ZFPs that specifically bind to the *C9ORF72* gene for a period of time. Following termination by Pfizer for the Company's material breach, the Company will not be permitted to research, develop, manufacture or commercialize ZFPs that specifically bind to the *C9ORF72* gene for a period of time.

The Company received a $12.0 million upfront payment from Pfizer and is eligible to receive up to $60.0 million in development milestone payments from Pfizer contingent on the achievement of specified preclinical development, clinical development and first commercial sale milestones, and up to $90.0 million commercial milestone payments if annual worldwide net sales of the licensed products reach specified levels. In addition, Pfizer will pay the Company royalties based on an escalating tiered, mid- to high-single digit percentage of the annual worldwide net sales of the licensed products. These royalty payments are subject to reduction due to patent expiration, entry of biosimilar products to the market and payments made under certain licenses for third-party intellectual property. Each party will be responsible for the cost of its performance of the research program. Pfizer will be operationally and financially responsible for subsequent development, manufacturing and commercialization of the licensed products. To date, a milestone of $5.0 million has been achieved and paid, however no products have been approved and therefore no royalty fees have been earned under the *C9ORF72* Pfizer agreement.

The Company assessed the agreement with Pfizer in accordance with ASC Topic 606 and concluded that Pfizer is a customer. The Company concluded the total transaction price under this agreement is $17.0 million, which represents the upfront fees of $12.0 million and one unconstrained milestone in the amount of $5.0 million. None of the constrained clinical or regulatory milestones have been included in the transaction price. As part of its evaluation of the constraint, the Company considered numerous factors, including the fact that achievement of the milestones at this time is uncertain and contingent upon future periods when the uncertainty related to the variable consideration is resolved. The Company will re-evaluate the transaction price, including its estimated variable consideration included in the transaction price and all constrained amounts, in each reporting period and as uncertain events are resolved or other changes in circumstances occur.

The Company has identified the performance obligations within this agreement as a license to the technology and ongoing research services. The Company concluded that the license is not discrete as it does not have stand-alone value to Pfizer apart from the services to be performed by the Company pursuant to the agreement. As a result, the Company recognizes revenue from the upfront payment based on proportional performance of the ongoing research services over the estimated period the Company will perform research services. The estimation of progress towards the satisfaction of its performance obligation and project cost is reviewed quarterly and adjusted, as needed, to reflect the Company's current assumptions regarding the timing of its deliverables.

The Company satisfied the deliverables and research services responsibilities within the arrangement in September 2020, and as a result, earned a $5.0 million milestone, which the Company recognized on a cumulative basis during the year ended December 31, 2020. In addition, the Company recognized the remaining deferred revenue from the upfront payment in September 2020 and no revenues have been recognized during the three months ended March 31, 2021. The Company recognized $0.4 million of upfront license fee and research services as revenue related to this agreement during the three months ended March 31, 2020.

Sanofi Genzyme

In January 2014, the Company entered into an exclusive worldwide collaboration and license agreement to develop therapeutics for hemoglobinopathies, focused on beta thalassemia and sickle cell disease ("SCD"). The agreement was originally signed with BIMA, who subsequently assigned it to Bioverativ Inc., which was later acquired by Sanofi. Under the agreement, the Company is jointly conducting two research programs: the beta thalassemia program and the SCD program. In the beta thalassemia program, the Company is responsible for all discovery, research and development activities through the first human clinical trial. In the SCD program, both parties are responsible for research and development activities through the submission of an IND application for ZFP therapeutics intended to treat SCD.

Under both programs, Sanofi is responsible for subsequent worldwide clinical development, manufacturing and commercialization of licensed products developed under the agreement. At the end of the specified research terms for each program or under certain specified circumstances, Sanofi has the right to step in and take over any of the Company's remaining activities. Furthermore, the Company has an option to co-promote in the U.S. any licensed products to treat beta thalassemia and SCD developed under the agreement, and Sanofi will compensate the Company for such co-promotion activities. Subject to the terms of the agreement, the Company has granted Sanofi an exclusive, royalty-bearing license, with the right to grant sublicenses, to use certain ZFP and other technology controlled by the Company for the purpose of researching, developing, manufacturing and commercializing licensed products developed under the agreement. The Company also granted Sanofi a non-exclusive worldwide, royalty-free fully paid license with the right to grant sublicenses, under the Company's interest in certain other intellectual property developed pursuant to the agreement. During the term of the agreement, the Company is not permitted to research, develop, manufacture or commercialize, outside of the agreement, certain gene therapy products that target genes relevant to the licensed products.

The agreement may be terminated by (i) the Company or Sanofi for the uncured material breach of the other party, (ii) the Company or Sanofi for the bankruptcy or other insolvency proceeding of the other party; (iii) Sanofi, upon 180 days' advance written notice to the Company and (iv) Sanofi, for certain safety reasons upon written notice to, and after consultation with, the Company. As a result, actual future milestone payments could be lower than the amounts stated above.

Under the agreement, the Company received an upfront license fee of $20.0 million and is eligible to receive up to $115.8 million in payments upon the achievement of specified clinical development and regulatory milestones, as well as up to $160.5 million in payments upon the achievement of specified sales milestones. The total amount of potential regulatory, clinical development and sales milestone payments, assuming the achievement of all specified milestones in the agreement, is up to $276.3 million. In addition, the Company will receive royalty payments for each licensed product that are a tiered double-digit percentage of annual net sales of each product. Sanofi reimburses Sangamo for agreed upon costs incurred in connection with research and development activities conducted by Sangamo. To date, a $6.0 million milestone has been achieved related to ST-400 for beta thalassemia and another $7.5 million milestone has been achieved related to SCD, however no products have been approved and therefore no royalty fees have been earned under the Sanofi agreement.

All contingent payments under the agreement, when earned, will be non-refundable and non-creditable. The transaction price of $93.3 million includes the upfront license fee of $20.0 million, two unconstrained milestones in the amount of $13.5 million and estimated research costs of $59.8 million for identified research projects over the estimated performance period, as all unachieved milestone amounts are fully constrained. As part of its evaluation of the constraint, the Company considered numerous factors, including the fact that achievement of the milestones at this time is uncertain and contingent upon future periods when the uncertainty related to the variable consideration is resolved. The Company will re-evaluate the transaction price, including the estimated variable consideration included in the transaction price and all constrained amounts, in each reporting period and as uncertain events are resolved or other changes in circumstances occur. None of the constrained clinical or regulatory milestones have been included in the transaction price.

The Company assessed the agreement with Sanofi in accordance with ASC Topic 606 and concluded that Sanofi is a customer. The Company has identified the performance obligations within this arrangement as a license to the technology and ongoing research services activities. The Company concluded that the license is not discrete as it does not have stand-alone value to Sanofi apart from the research services to be performed pursuant to the agreement. As a result, the Company recognizes revenue from the upfront payment based on proportional performance of the ongoing research services through 2022, the estimated period the Company will perform research services. The estimation of progress towards the satisfaction of performance obligation and project cost is reviewed quarterly and adjusted, as needed, to reflect the Company's current assumptions regarding the timing of its deliverables. Related costs and expenses under these arrangements have historically approximated the revenues recognized. As of March 31, 2021, and December 31, 2020, the Company had deferred revenue of $0.8 million and $1.2 million, respectively, related to this agreement.

In August 2019, the Company achieved a $6.0 million milestone with Sanofi upon dosing of the third subject in the ST-400 beta thalassemia Phase 1 clinical trial. The cumulative revenue recognized in connection with this milestone was approximately $5.9 million as of March 31, 2021 and included $0.1 million recognized during the three months ended March 31, 2021.

In December 2019, the Company achieved a $7.5 million milestone with Sanofi upon dosing of the first subject in the SCD Phase 1 clinical trial. The cumulative revenue recognized in connection with this milestone was approximately $7.3 million as of March 31, 2021 and included $0.1 million recognized during the three months ended March 31, 2021.

Revenues recognized under the agreement for the three months ended March 31, 2021 and 2020 were as follows (in thousands):

	Three Months Ended March 31,	
	2021	2020
Revenue related to Sanofi agreement:		
Recognition of upfront fee	$ 227	$ (729)
Research services	679	1,720
Milestone achievement	154	(492)
Total	$ 1,060	$ 499

In March 2020, the Company recorded an adjustment to revenue related to a change in estimate in connection with the collaboration agreement with Sanofi. This adjustment was a direct result of the decision in March 2020 to increase the project scope and the corresponding costs, both of which resulted in a decrease in the measure of proportional cumulative performance.

This adjustment decreased revenue by $2.2 million, increased net loss by $2.2 million and increased the Company's basic net loss per share by $0.02 for the three months ended March 31, 2020.

California Institute for Regenerative Medicine

In May 2018, the California Institute for Regenerative Medicine ("CIRM") granted a Strategic Partnership Award for $8.0 million to fund the clinical studies of a potentially curative ZFP therapeutic for the treatment of beta thalassemia based on the application of Sangamo's ZFN genome editing technology. The grant exists through December 31, 2022 and provides matching funds to support the evaluate ST-400, a gene-edited cell therapy candidate for people with transfusion-dependent beta thalassemia. As of March 31, 2021, the Company had received $5.2 million under the award.

Under the terms of the CIRM grants, the Company is obligated to pay royalties and licensing fees based on a low single digit royalty percentage on net sales of CIRM-funded product candidates or CIRM-funded technology. The Company has the option to decline any and all amounts awarded by CIRM and as an alternative to revenue sharing, the Company has the option to convert the award to a loan. No such election has been made as of the date of the issuance of these financial statements. If the Company terminates a CIRM-funded clinical trial, it is obligated to repay any unused CIRM funds received. Therefore, as of March 31, 2021, and December 31, 2020, $6.6 million and $6.4 million, respectively, including interest, related to this award are recorded as a loan in other long-term liabilities on the accompanying Condensed Consolidated Balance Sheets as the Company does not expect to repay these amounts within the next 12 months.

NOTE 6—INCOME TAXES

The Company's provision for income taxes for interim periods is determined using an estimate of its annual effective tax rate, adjusted for discrete items, if any, that arise during the period. Each quarter, the Company updates its estimate of the annual effective tax rate, and if the estimated annual effective tax rate changes, the Company makes a cumulative adjustment in such period. During the three months ended March 31, 2021 and 2020, the Company recorded income tax expense of $0.3 million and nil, respectively. The Company continues to maintain a full valuation allowance on its U.S. federal and state net deferred tax assets and on the Sangamo France net deferred tax assets, as the Company believes it is not more likely than not that these benefits will be realized. The tax expense for the three months ended March 31, 2021 was primarily due to foreign income tax expense.

NOTE 7—COMMITMENTS

Leases

Sangamo occupies approximately 87,700 square feet of office and research and development laboratory facilities in Brisbane, California, pursuant to a lease that expires in May 2029. Sangamo also occupies approximately 59,200 square feet of research and office space in Richmond, California, pursuant to leases that expire in August 2026. In addition, the Company leases approximately 25,600 square feet of office, and research and development space in Valbonne, France, subject to leases that expire beginning in June 2025 through January 2030.

Certain of these leases include renewal options at the election of the Company to renew or extend the lease for an additional five to ten years. These optional periods have not been considered in the determination of the ROU assets or lease liabilities associated with these leases as the Company did not consider it reasonably certain that it would exercise the options.

The Company performed evaluations of its contracts and determined each of its identified leases are operating leases. For the three months ended March 31, 2021 and 2020, the Company incurred $2.7 million and $2.6 million, respectively, of lease costs in relation to these operating leases. These lease costs were included in operating expenses in the Condensed Consolidated Statements of Operations. For the three months ended March 31, 2021 and 2020, variable lease expenses were $0.7 million and $0.5 million, respectively, and were not included in the measurement of the Company's operating ROU assets and lease liabilities. This variable expense consists primarily of the Company's proportionate share of operating expenses, property taxes and insurance and is classified as lease expense, due to the Company's election to not separate lease and non-lease components.

Cash paid for amounts included in the measurement of operating lease liabilities for the three months ended March 31, 2021 and 2020, was $1.7 million and $1.6 million respectively, and was included in net cash provided by operating activities in the Company's Condensed Consolidated Statements of Cash Flows.

As of March 31, 2021, the maturities of the Company's operating lease liabilities were as follows (in thousands):

	Total
Nine months ending December 31, 2021:	$ 4,663
2022	6,991
2023	7,089
2024	7,237
2025	7,308
Thereafter	20,037
Total lease payments	53,325
Less:	
Imputed interest	(10,980)
Total	$ 42,345
Reported as of March 31, 2021:	
Operating lease liabilities - current (included in other accrued liabilities on the Condensed Consolidated Balance Sheet)	$ 3,882
Operating lease liabilities - long-term	38,463
Total	$ 42,345

As of March 31, 2021, the weighted-average remaining lease term is 7.5 years and the weighted-average incremental borrowing rate used to determine the operating lease liability was 6.2% for the Company's operating leases.

In January 2021, the Company entered into an amendment to an existing lease to acquire approximately 5,000 square feet of research and office space in Richmond, California. With this amendment, the existing lease expires in August 2026. Total lease payments over the life of this amended lease are approximately $0.9 million. Variable lease payments include the Company's allocated share of costs incurred and expenditures made by the landlord in the operation and management of the building. On February 1, 2021, the lease commencement date, the Company recorded an operating lease right-of-use asset and a corresponding lease liability of $0.7 million.

In January 2021, the Company also entered into a new lease to acquire approximately 5,800 square feet of research and office space in Valbonne, France, that expires in January 2030. Total lease payments over the life of this amended lease are approximately $0.8 million. Variable lease payments include the Company's allocated share of costs incurred and expenditures made by the landlord in the operation and management of the building. On January 29, 2021, the lease commencement date, the Company recorded an operating lease right-of-use asset and a corresponding lease liability of $0.6 million.

The Company does not have any financing leases.

Contractual Commitments

The following table sets forth the non-cancelable material contractual commitments under manufacturing-related supplier arrangements as of March 31, 2021 (in thousands):

Party	Total commitments	Expiry date
Brammer Bio MA - a Thermo Fisher Scientific Inc. subsidiary	$ 6,157	December 2021
Lonza Netherlands, B.V.	11,804	December 2022
Total contractual commitments	$ 17,961	

The Company also had $0.9 million of license obligations related to its intellectual property as of March 31, 2021.

NOTE 8—STOCK-BASED COMPENSATION

The following table shows total stock-based compensation expense included in the Condensed Consolidated Statements of Operations for the three months ended March 31, 2021 and 2020 (in thousands):

	Three Months Ended March 31,	
	2021	2020
Research and development	$ 4,252	$ 2,839
General and administrative	3,272	2,781
Total stock-based compensation expense	$ 7,524	$ 5,620

NOTE 9—STOCKHOLDERS' EQUITY

At-the-Market Offering Agreement

In August 2020, the Company entered into an Open Market Sale Agreement℠ with Jefferies LLC ("Jefferies") with respect to an at-the-market offering program under which the Company may offer and sell, from time to time at its sole discretion, shares of the Company's common stock having an aggregate offering price of up to $150.0 million through Jefferies as the Company's sales agent or principal. The Company is not obligated to sell any shares under the sales agreement. During the three months ended March 31, 2021, the Company sold 1,034,762 shares of its common stock for net cash proceeds of approximately $15.7 million.

NOTE 10—ACQUISITION OF SANGAMO THERAPEUTICS FRANCE S.A.S.

In 2018, Sangamo entered into various agreements with the goal of eventually acquiring 100% of Sangamo France's share capital, including arrangements with the holders of approximately 477,000 ordinary shares of Sangamo France pursuant to which the Company has the right to purchase such shares from the holders, and such holders have the right to sell to the Company such shares from time to time through mid-2021. As of March 31, 2021, the Company acquired approximately 453,000 of the 477,000 shares, increasing its ownership of the ordinary shares of Sangamo France to 99.9%. The fair value of the option to acquire the remaining shares was estimated to be an asset with immaterial balance as of March 31, 2021. See "Note 2 — Fair Value Measurements-*Free Shares Asset*" for information regarding the valuation method.

The acquisition of Sangamo France was accounted for as a business combination in accordance with ASC Topic 805, *Business Combinations*, in exchange for total consideration of approximately $45.9 million at the October 2018 acquisition date. The operating results of Sangamo France after the October 2018 acquisition date have been included in the Company's Condensed Consolidated Statements of Operations.

There was no goodwill impairment during the three months ended March 31, 2021 or during 2020 and, as noted below, substantially all of the non-controlling interest on the October 2018 acquisition date was subsequently acquired by the Company and, accordingly, substantially all of the goodwill is allocated to the Company as of March 31, 2021 and December 31, 2020.

Non-Controlling Interest

The fair value of the remaining non-controlling was determined based on the number of outstanding shares comprising the non-controlling interest and the $2.99 acquisition price per share as of the October 2018 acquisition date. The non-controlling interest is presented as a component of stockholders' equity on the Company's Condensed Consolidated Balance Sheets.

Non-controlling interest as of March 31, 2021 was as follows (in thousands):

	Total
Balance at December 31, 2020	$ (868)
Fair value of additional shares acquired	(64)
Loss attributable to non-controlling interest	(6)
Balance at March 31, 2021	$ (938)

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

The discussion in "Management's Discussion and Analysis of Financial Condition and Results of Operations" contains trend analysis, estimates and other forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. These forward-looking statements reflect our current views with respect to future events, are based on assumptions and involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performances or achievements expressed or implied by the forward-looking statements. When reviewing the discussion below, you should keep in mind the substantial risks and uncertainties that could impact our business. In particular, we encourage you to review the risks and uncertainties summarized under "Special Note Regarding Forward-Looking Statements" that appears in the forepart of this report and as discussed in more detail under "Risk Factors" in Part I, Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2020 as filed with the SEC on February 24, 2021, or the 2020 Annual Report. You should also read the following discussion and analysis in conjunction with our Condensed Consolidated Financial Statements and accompanying notes included in this report and the Consolidated Financial Statements and accompanying notes thereto included in our 2020 Form 10-K.

Overview

We are a clinical-stage genomic medicine company committed to translating ground-breaking science into medicines that transform the lives of patients with serious diseases. We plan to deliver on this mission through development of (i) our clinical and preclinical product candidates, (ii) our novel science and (iii) our growing in-house manufacturing capabilities.

Our current clinical-stage product candidates are:

- Giroctocogene fitelparvovec, also known as SB-525, our lead product candidate, is a gene therapy for the treatment of hemophilia A and is currently being evaluated in the registrational Phase 3 AFFINE (efficAcy and saFety Factor vIii geNe thErapy) clinical trial. We are developing giroctocogene fitelparvovec with our collaborator Pfizer Inc., or Pfizer;
- ST-920, our wholly-owned gene therapy product candidate for the treatment of Fabry disease, is currently being evaluated in our Phase 1/2 STAAR clinical study;
- SAR445136, formerly known as BIVV003, our cell therapy product candidate for the treatment of sickle cell disease, or SCD, is currently being evaluated in our Phase 1/2 PRECIZN-1 clinical study. We are developing SAR445136 with our collaborator Sanofi S.A., or Sanofi;
- ST-400, our cell therapy product candidate for the treatment of transfusion dependent beta thalassemia, is currently being evaluated in our Phase 1/2 Thales clinical study. We are developing ST-400 with our collaborator Sanofi; and
- TX200, our wholly-owned Chimeric Antigen Receptor, or CAR, engineered regulatory T cell, or CAR-Treg, cell therapy product candidate for the treatment of HLA-A2 mismatched kidney transplant rejection is currently being evaluated in our Phase 1/2 STEADFAST clinical study.

Moreover, we are focusing our preclinical development in emerging areas for us, including CAR-Treg cell therapies for autoimmune disorders and genome engineering for neurological diseases. Indications for our other preclinical programs include neurodevelopmental disorders, cancer, inflammatory bowel disease, or IBD, tauopathies such as Alzheimer's and neurodegenerative diseases such as amyotrophic lateral sclerosis, or ALS, multiple sclerosis, or MS, and Huntington's disease, some of which we are developing with our collaborators Biogen MA, Inc. and Biogen International GmbH, which we refer to together as Biogen, Kite, Novartis Institutes for BioMedical Research, Inc., or Novartis, Pfizer and Takeda Pharmaceutical Company Limited.

Our multiple collaborations with biopharmaceutical companies bring us important financial and strategic benefits and reinforce the potential of our research and development efforts and our zinc finger protein, or ZFP, technology platform. They leverage our collaborators' therapeutic and clinical expertise and commercial resources with the goal to bring our medicines more rapidly to patients. We believe these collaborations reflect of the value of our ZFP technology platform and will potentially expand the addressable markets of our product candidates. To date, we have received approximately $815.0 million in upfront licensing fees, milestone payments, and proceeds from sale of our common stock to collaborators and have the right to earn up to $7.0 billion in future milestone payments from our collaborations, in addition to potential product royalties.

We believe that our current and future in-house manufacturing capacity provides us a competitive advantage. We currently operate an in-house adeno-associated virus, or AAV, manufacturing facility in our Brisbane, California headquarters, and we are building cell therapy manufacturing facilities in Brisbane, California and Valbonne, France, which we expect to be operational by the end of 2021. Our manufacturing strategy is to provide greater flexibility, quality and control by building a

balanced and necessary capacity achieved through our in-house manufacturing and contract manufacturing organization, or CMO, partnerships, investing in manufacturing processes and analytics and developing a strong supply chain.

Business Updates

- We and Pfizer have completed enrollment in the lead-in study to the registrational Phase 3 AFFINE clinical trial of giroctocogene fitelparvovec, our gene therapy product candidate for the treatment of severe hemophilia A. This lead-in study will follow patients for six months to establish a baseline prior to treatment with giroctocogene fitelparvovec. We and Pfizer expect to present a pivotal data readout from the AFFINE trial as early as 2022, as well as a two-year update from the Phase 1/2 Alta clinical study in the fourth quarter of 2021.
- We have enrolled the fourth patient in our Phase 1/2 STAAR clinical study of ST-920, our wholly-owned gene therapy product candidate for the treatment of Fabry disease. We plan to present initial clinical data from this study in the fourth quarter of 2021.
- The U.S. Food and Drug Administration, or FDA, granted Fast Track Designation to SAR445136, formerly known as BIVV003, our cell therapy product candidate for the treatment of SCD. In addition, the European Medicines Agency, or EMA, granted Orphan Designation to SAR445136. According to minutes of the EMA's Committee for Orphan Medicinal Products, the grant was based in part on the following preliminary clinical observations from the three patients treated out of the six patients enrolled in our PRECIZN-1 study as of December 2020:
    - As of December 2020, these patients had 52 weeks, 13 weeks, and 29 days of follow-up, respectively.
    - The first patient treated was on standard of care hydroxyurea daily for several years and had frequent hospitalizations due to 10 severe vaso-occlusive crises, or VOCs, including hospitalizations within the two years prior to study enrollment.
    - The second patient treated also had numerous VOCs and received chronic red blood cell, or RBC, transfusions since the age of seven.
    - The third patient treated also has a previous history of chronic RBC transfusions and a VOC in the two years prior to enrollment.
    - None of these three treated patients experienced recurrence of previous SCD symptoms as of December 2020.
    - The minutes stated that the preliminary clinical observations of SAR445136 as well as the potential of long-term effects that may obviate the need for continuous treatment, suggested a potential clinically relevant advantage versus hydroxyurea.

  We and Sanofi expect to enroll a total of eight patients in the PRECIZN-1 study evaluating SAR445136 and expect to present initial clinical data from the study at a medical meeting by the end of 2021. The initial data we expect to present will reflect a more mature and more comprehensive data set than the preliminary clinical observations shared by the EMA in the committee minutes.
- We have initiated and opened for enrollment our Phase 1/2 STEADFAST clinical study evaluating TX200, our wholly-owned autologous CAR-Treg cell therapy product candidate for the treatment of HLA-A2 mismatched kidney transplant rejection. Patient recruitment is now open in two clinical sites in Belgium and the Netherlands, and we plan to enroll up to fifteen patients to receive TX200 and up to six patients in a control group. We expect to enroll the first patient in this study by the end of 2021, and to dose the first patient several months after enrollment. The primary objective of this study is to assess the safety and tolerability of TX200, and secondary objectives include the incidence of biopsy-confirmed acute graft rejection, incidence of chronic graft rejection and localization of TX200 CAR-Treg cells in the transplanted kidney. We also plan to evaluate the ability of TX200 to reduce systemic immunosuppressive therapy.
- Our collaborator Kite Pharma, Inc., or Kite, a Gilead company, recently decided not to submit an investigational new drug application, or IND, at this time for KITE-037, our allogeneic anti-CD19 CAR-T cell therapy product candidate for the treatment of cancer. This program and the underlying collaboration to develop cell therapies to treat cancer remain active.
- We recently published preclinical data on tau- and alpha-synuclein targeted zinc finger transcriptional repressors in *Science Advances* and at the 15th International Conference on Alzheimer's & Parkinson's Diseases Conference, respectively. We also expect to present preclinical data on repression of alpha-synuclein and *C9ORF72* repeat expansions at the upcoming 24th Annual Meeting of the American Society of Gene & Cell Therapy on May 11,2021.

Estimated Impacts of Evolving COVID-19 Pandemic

We continue to experience impacts from the evolving COVID-19 pandemic on our business and operations and could continue to experience these or potentially more severe impacts for the rest of the 2021 if the pandemic persists in the United States, United Kingdom, France and locations of our clinical studies and trials. We continue to conduct business operations pursuant to a modified operating plan that includes enhanced workplace safety protocols and modified working schedules in our laboratories. Employees who are able to fulfill their job duties working from home are required to work from home, and have been doing so since March 2020, although we are currently planning a phased return to the office for most employees. These protocols and modifications have slowed our productivity and disrupted our business to a moderate degree and are likely to continue doing so through 2021. For example, we have experienced periodic short-term disruptions to our onsite laboratory and manufacturing operations while addressing positive cases of COVID-19 by onsite workers, and our laboratory and manufacturing operations could experience longer term disruptions in the future in the event of a significant outbreak of COVID-19 among our onsite workers. Moreover, from time to time, we have been required to reorganize and prioritize our research resources to mitigate moderate COVID-19 impacts arising from travel restrictions, laboratory density restrictions and laboratory supply constraints. If our research programs encounter longer-term disruptions, it could impact our ability to support our biopharmaceutical partners as contemplated in our collaboration agreements and could result in adjustments to our research timelines, although we do not believe that the short-term disruptions to date have resulted in any such impacts.

Additionally, our Phase 1/2 STAAR clinical study evaluating ST-920, our wholly-owned gene therapy product candidate for the treatment of Fabry disease, has experienced delays in its timeline due to COVID-19 impacts and the diversion of healthcare resources to fight the pandemic. For example, we estimate that the opening of the clinical trial sites in the United Kingdom for this study experienced a delay of approximately one year due to the significant prevalence of COVID-19 in the United Kingdom. Additionally, we have experienced delays in recruiting, enrolling and dosing patients for this study at our U.S. trial sites, due in some part to the understandable hesitation of patients to travel by plane to trial sites not within driving distance and to enter medical facilities during the pandemic and in other part to trial sites prioritizing COVID-19 clinical care over research activities such as the STAAR study. Moreover, we have experienced some short-term delays in sourcing the necessary raw materials to manufacture supplies for the STAAR study due to COVID-19 impacts. We estimate that these challenges have set back our STAAR study timelines three to six months. While we currently still expect to present initial clinical study data by the end of 2021, this timeline could be revised if COVID-19 impacts to our enrollment and dosing of patients and to our sourcing of raw materials for this study intensify because of vaccination delays, new COVID-19 variants or unexpected events.

In addition, our STEADFAST study evaluating TX200, our wholly-owned CAR-Treg cell therapy product candidate for the treatment of kidney transplant rejection, has experienced delays in its timeline due to COVID-19 impacts related to manufacturing and technology transfer challenges with our CMOs. We estimate that these challenges set back our clinical study timeline by approximately three months. While we have now initiated this clinical study and expect to enroll the first patient in this study by the end of 2021, this timeline could be revised if COVID-19 impacts result in additional delays.

With respect to our partnered programs, the timelines for the studies and trials managed by our collaborators are also subject to potential delay in the future if these studies and trials experience similar challenges that we have experienced in our STAAR and STEADFAST studies.

Going forward, we will continue to monitor the impact of COVID-19 on our operations, research commitments and clinical trials and those of our collaborators, clinical trial sites and CMOs. The magnitude of these impacts will depend, in part, on the length and severity of the COVID-19 pandemic and related government orders and restrictions, and how the pandemic limits the ability of us and our business partners to operate business in the ordinary course. Disruptions to these operations, and possibly more severe disruptions in the future that could arise due to the extension of government orders or new government orders applicable in the places we operate or our industry generally or to us and our facilities specifically, could impede our ability to conduct research in a timely manner, comply with our research obligations to our collaborators and advance the development of our therapeutic programs. These delays and disruptions could result in adverse material impacts to our business, operating results and financial condition.

We do not anticipate any material negative impact on our financial condition in 2021 as a result of the COVID-19 pandemic. We believe we are well positioned financially in the near term to execute on our wholly-owned and partnered research and clinical programs. As of March 31, 2021, we had $629.5 million in cash, cash equivalents and marketable securities. Although we believe we are well capitalized currently, the effects of the evolving pandemic could result in disruption of global financial markets, impairing our ability to access capital, which could negatively affect our liquidity in the future. We do not currently anticipate any material impairments to the valuation of the financial assets or goodwill on our balance sheet as a result of COVID-19. We do not believe that the remote workplace arrangements we have implemented for our office-based employees have affected our financial reporting or control systems.

The extent to which the COVID-19 pandemic will impact our business, operations and financial condition, either directly or indirectly, will depend on future developments that remain highly uncertain at the present time. These developments include

the ultimate duration and severity of the pandemic, the impacts of new COVID-19 variants, travel restrictions, quarantines and social distancing requirements in the United States, France, United Kingdom and other countries, business closures or business disruptions and the effectiveness and timeliness of actions taken in the United States, France, United Kingdom and other countries to contain and treat the disease, including the effectiveness and timing of vaccination programs. Although certain government orders and restrictions have eased, and phased re-openings are underway, it is not certain when such restrictions and orders will be fully lifted, and the surge of new variants of the virus may result in the return of prior orders and restrictions or new quarantine and shelter-in-place orders or other restrictions. As our understanding of events evolves and additional information becomes available, we may materially change our guidance relating to our revenues, expenses and timelines for manufacturing, clinical trials and research and development.

Certain Components of Results of Operations

Our revenues have consisted primarily of revenues from upfront licensing fees, reimbursements for research services, milestones achievements and research grant funding. We expect revenues to continue to fluctuate from period to period and there can be no assurance that new collaborations or partner reimbursements will continue beyond their initial terms or that we are able to meet the milestones specified in these agreements.

We have incurred net losses since inception and expect to incur losses for at least the next several years as we continue our research and development activities. To date, we have funded our operations primarily through the issuance of equity securities and revenues from collaborations and research grants.

We expect to continue to devote substantial resources to research and development in the future and expect research and development expenses to increase in the next several years if we are successful in advancing our product candidates from research stage through clinical trials. Pursuant to the terms of our agreements with Biogen, Kite, Novartis and Sanofi, certain expenses related to research and development activities will be reimbursed to us. The reimbursement funds to be received from Biogen, Kite, Novartis and Sanofi will be recognized as revenue as the related costs are incurred and collection is reasonably assured.

Critical Accounting Policies and Estimates

The accompanying management's discussion and analysis of our financial condition and results of operations are based upon our Condensed Consolidated Financial Statements and the related disclosures, which have been prepared in accordance with generally accepted accounting principles in the United States. The preparation of these Condensed Consolidated Financial Statements requires us to make estimates, assumptions and judgments that affect the reported amounts in our Condensed Consolidated Financial Statements and accompanying notes. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

We believe our critical accounting policies relating to revenue recognition and valuation of long-lived assets including goodwill and intangible assets are the most significant estimates and assumptions used in the preparation of our Condensed Consolidated Financial Statements.

There have been no significant changes in our critical accounting policies and estimates during the three months ended March 31, 2021, as compared to the critical accounting policies and estimates disclosed in "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in our 2020 Form 10-K.

Results of Operations for the Three Months Ended March 31, 2021 and 2020

Revenues

	Three Months Ended March 31, (in thousands, except percentage values)			
	2021	2020	Change	%
Revenues	$ 26,280	$ 13,076	$ 13,204	101%

Total revenues consisted of revenues from collaboration agreements and research grants. We anticipate revenues over the next several years will be derived primarily from our collaboration agreements with Biogen, Kite, Novartis, Pfizer and Sanofi as we continue to recognize upfront and milestone payments received under such agreements over time.

The increase of $13.2 million in revenues for the three months ended March 31, 2021, compared to the same period in 2020, was primarily due to the recognition of upfront license fees and research revenue of $10.4 million and $7.9 million under our collaboration agreements with Biogen and Novartis, which became effective in April and July 2020, respectively. These increases were partially offset by a decrease of $3.2 million in revenue related to our giroctocogene fitelparvovec collaboration

agreement with Pfizer, as no revenue was recognized in 2021 due to completion of activities under this collaboration as of December 31, 2020.

Operating expenses

	Three Months Ended March 31, (in thousands, except percentage values)			
	2021	2020	Change	%
Operating expenses:				
Research and development	$ 56,434	$ 41,479	$ 14,955	36%
General and administrative	16,148	16,119	29	—
Total operating expenses	$ 72,582	$ 57,598	$ 14,984	26%

Research and Development Expenses

Research and development expenses consisted primarily of compensation related expenses, including stock-based compensation, laboratory supplies, preclinical and clinical studies, manufacturing clinical supply, contracted research, allocated facilities and information technology expenses.

The increase of $15.0 million in research and development expenses for the three months ended March 31, 2021, compared to the same period in 2020, was primarily driven by a $7.3 million increase in clinical and manufacturing supply expenses due to the timing of our trials and increase in activities attributed to our new collaborations, a $5.3 million increase in compensation expense as a result of increased headcount to support our programs, clinical trials and start-up of our manufacturing operations, and a $1.8 million increase in overhead costs as we ramp up our internal manufacturing operations. Stock-based compensation expense included in research and development expenses was $4.3 million and $2.8 million for the three months ended March 31, 2021 and 2020, respectively.

We expect to continue to devote substantial resources to research and development in the future and expect research and development expenses to increase in the next several years if we are successful in advancing our clinical programs and if we are able to progress our earlier stage product candidates into clinical trials.

The length of time required to complete our development programs and our development costs for those programs may be impacted by the scope and timing of enrollment in clinical trials for our product candidates, our decisions to pursue development programs in other therapeutic areas, and whether we pursue development of our product candidates with a partner or collaborator or independently. For example, our product candidates are being developed in multiple therapeutic areas, and we do not yet know how many of those therapeutic areas we will continue to pursue. Furthermore, the scope and number of clinical trials required to obtain regulatory approval for each pursued therapeutic area is subject to the input of the applicable regulatory authorities, and we have not yet sought such input for all potential therapeutic areas that we may elect to pursue, and even after having given such input, applicable regulatory authorities may subsequently require additional clinical studies prior to granting regulatory approval based on new data generated by us or other companies, or for other reasons outside of our control. As a condition to any regulatory approval, we may also be subject to post-marketing development commitments, including additional clinical trial requirements. As a result of the uncertainties discussed above, we are unable to determine the duration of or complete costs associated with our development programs.

Our potential therapeutic products are subject to a lengthy and uncertain regulatory process that may not result in our receipt of any necessary regulatory approvals. Failure to receive the necessary regulatory approvals would prevent us from commercializing the product candidates affected. In addition, clinical trials of our product candidates may fail to demonstrate safety and efficacy, which could prevent or significantly delay regulatory approval. The full extent of the impact of the COVID-19 pandemic on our business, operations and financial results will depend on numerous evolving factors that we may not be able to accurately predict. A discussion of the risks and uncertainties with respect to our research and development activities, including completing the development of our product candidates, and the consequences to our business, financial position and growth prospects can be found in “Risk Factors” in Part I, Item 1A of the 2020 Annual Report.

General and Administrative Expenses

General and administrative expenses consist primarily of compensation related expenses including stock-based compensation for executive, legal, finance and administrative personnel, professional fees, allocated facilities and information technology expenses, and other general corporate expenses.

General and administrative expenses remained consistent for the three months ended March 31, 2021, compared to the same period in 2020. Stock-based compensation expense included in general and administrative expenses was $3.3 million and $2.8 million for the three months ended March 31, 2021 and 2020, respectively.

As we continue to build out our product portfolio and advance our product candidates into the clinic, we expect higher general and administrative expenses to support the growth of the business.

Interest and other income, net

Interest and other income, net, decreased by $0.9 million for the three months ended March 31, 2021, compared to the same period in 2020, primarily due to a decrease of $1.4 million in interest income reflecting the decline in market interest rates.

Liquidity and Capital Resources

Liquidity

Since inception, we have incurred significant net losses and we have funded our operations primarily through the issuance of equity securities, payments from corporate collaborators and strategic partners and research grants.

As of March 31, 2021, we had cash, cash equivalents, and marketable securities totaling $629.5 million compared to $692.0 million as of December 31, 2020. Our most significant use of capital was for employee compensation and external research and development expenses, such as manufacturing, clinical trials and preclinical activity related to our therapeutic programs. Our cash and investment balances are held in a variety of interest-bearing instruments, including commercial paper, money market funds, corporate debt securities, certificates of deposit, asset-backed securities and U.S. government-sponsored entity debt securities. Cash in excess of immediate requirements is invested in accordance with our investment policy with a view toward capital preservation and liquidity.

In August 2020, we entered into an Open Market Sale Agreement with Jefferies LLC, or Jefferies, providing for the sale of up to $150.0 million of our common stock from time to time in "at-the-market" offerings under an existing shelf registration statement. During the three months ended March 31, 2021, we sold 1,034,762 shares of our common stock under the sales agreement for net proceeds of approximately $15.7 million.

While we expect our rate of cash usage to increase in the future, in particular to support our product development endeavors, we currently believe that our available cash, cash equivalents and marketable securities and expected revenues from collaborations, strategic partnerships and research grants, will be adequate to fund our currently planned operations through at least the next 12 months from the date the Condensed Consolidated Financial Statements are issued. During this period of uncertainty and volatility related to the COVID-19 pandemic, we will continue to monitor our liquidity.

Cash Flows

Operating activities

Net cash used in operating activities was $68.6 million for the three months ended March 31, 2021, primarily reflecting our net loss of $45.9 million, a decrease in deferred revenues of $20.0 million, a decrease in accrued compensation and employee benefits by $7.6 million mainly attributed to bonus pay-outs, and a decrease in account payable and accrued liabilities of $3.8 million due to timing of payments. These decreases were partially offset by $9.4 million of non-cash expenses related to stock-based compensation and depreciation. The majority of the increase in cash used in operating activities during the three months ended March 31, 2021, compared to the same period in 2020, was primarily due to less cash provided by accounts receivable.

Investing activities

Net cash provided by investing activities for the three months ended March 31, 2021 consisted of $45.3 million mostly related to a net maturities, sales and purchases of marketable securities. The increase in cash provided by investing activities during the three months ended March 31, 2021, compared to the same period in 2020, was mostly due to an increase in net maturities, sales and purchases of marketable securities, partially offset by purchases of property and equipment.

Financing activities

Net cash provided by financing activities for the three months ended March 31, 2021 consisted of $15.2 million, mostly related to $16.2 million proceeds from at-the-market offering offset by the offering expenses of $0.5 million. The increase in cash provided in financing activities during the three months ended March 31, 2021, compared to the same period in 2020, was mostly due to proceeds from our at-the-market offering.

Operating Capital and Capital Expenditure Requirements

We anticipate continuing to incur operating losses for at least the next several years. While we expect our rate of cash usage to increase in the future, in particular to support our product development endeavors, we currently believe that our available cash, cash equivalents and marketable securities and expected revenues from collaborations, strategic partners and research grants, will be adequate to fund our currently planned operations through at least the next 12 months from the date the Condensed

Consolidated Financial Statements are issued. Although we believe we are well capitalized currently, the effects of the ongoing COVID-19 pandemic could result in significant disruption of global financial markets, impairing our ability to access capital, which could in the future negatively affect our liquidity. Future capital requirements beyond the next 12 months will be substantial, and we will need to raise substantial additional capital to fund the development, manufacturing and potential commercialization of our product candidates through equity or debt financing. In addition, as we focus our efforts on proprietary human therapeutics, we will need to seek FDA approvals of our product candidates, a process that could cost in excess of hundreds of millions of dollars per product. We regularly consider fund-raising opportunities and may decide, from time to time, to raise capital based on various factors, including market conditions and our plans of operation. Additional capital may not be available on terms acceptable to us, or at all. If adequate funds are not available, or if the terms of potential funding sources are unfavorable, our business and our ability to advance our product candidate pipeline would be harmed. Furthermore, any sales of additional equity securities, including sales pursuant to our at-the-market offering program, may result in dilution to our stockholders, and any debt financing may include covenants that restrict our business.

Our future capital requirements will depend on many forward-looking factors, including the following:

- the initiation, progress, timing and completion of clinical trials for our product candidates and potential product candidates;
- the outcome, timing and cost of regulatory approvals;
- the success of our collaboration agreements;
- delays that may be caused by changing regulatory requirements;
- the number of product candidates that we pursue;
- the costs involved in filing and prosecuting patent applications and enforcing and defending patent claims;
- the timing and terms of future in-licensing and out-licensing transactions;
- the cost and timing of establishing sales, marketing, manufacturing and distribution capabilities;
- the cost of procuring clinical and commercial supplies of our product candidates;
- the extent to which we acquire or invest in businesses, products or technologies, including the costs associated with such acquisitions and investments; and
- the costs of potential disputes and litigation.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements as defined in Item 303(a)(4)(ii) of Regulation S-K.

Contractual Obligations

Our future minimum contractual obligations as of December 31, 2020 were reported in the 2020 Annual Report. Other than as described below, during the three months ended March 31, 2021, there have been no other material changes outside the ordinary course of our business from the contractual obligations previously disclosed in our 2020 Annual Report.

In January 2021, we entered into an amendment to an existing lease to acquire approximately 5,000 square feet of research and office space in Richmond, California. With this amendment, the existing lease expires in August 2026. The contractual obligations during the lease term are approximately $0.9 million.

In January 2021, we also entered into a new lease to acquire approximately 5,800 square feet of research and office space in Valbonne, France that expires in January 2030. The contractual obligations during the lease term are approximately $0.8 million.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Our exposure to market risk relates to our cash, cash equivalents and marketable securities. The goals of our investment policy are preservation of capital, fulfillment of liquidity needs and capturing a market rate of return based on our investment policy parameters and market conditions. We select investments that maximize interest income to the extent possible within these guidelines. To achieve our goals, we maintain a portfolio of cash equivalents and investments in securities of high credit quality and with varying maturities to match projected cash needs.

The securities in our investment portfolio are not leveraged and are classified as available-for-sale. The majority of these available-for-sale securities are short-term in nature and subject to minimal interest rate risk. Our investments currently consist of commercial paper, corporate debt securities, certificates of deposit, asset-backed securities and U.S. government-sponsored entity debt securities. Our investment policy, approved by our Board of Directors, limits the amount we may invest in any one type of investment issuer, thereby reducing credit risk concentrations. All investments have a fixed interest rate and are carried at market

value, which approximates cost. We do not use derivative financial instruments in our investment portfolio. We do not believe that a change in interest rates would have a material negative impact on the value of our investment portfolio. Our market risks at March 31, 2021 have not changed materially from those discussed in Item 7A of our 2020 Annual Report.

Volatile market conditions arising from the evolving COVID-19 pandemic may result in significant changes to exchange rates relative to the U.S. dollar and may affect our operating results as expressed in U.S. dollars.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to provide reasonable assurance that information required to be disclosed in our Exchange Act reports 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, as appropriate, to allow timely decisions regarding required disclosure.

Under the supervision of our principal executive officer and principal financial officer, we evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) of the Exchange Act) as of March 31, 2021. Based on that evaluation, as of March 31, 2021, our principal executive officer and principal financial officer have concluded that our disclosure controls and procedures were effective at the reasonable assurance level.

Inherent Limitations on Controls and Procedures

Our management, including the principal executive officer and principal financial officer, does not expect that our disclosure controls and procedures and our internal control over financial reporting will prevent all error and all fraud. A control system, no matter how well designed and operated, can only provide reasonable assurances that the objectives of the control system are met. The design of a control system reflects resource constraints; the benefits of controls must be considered relative to their costs. Because there are inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, for our company have been or will be detected. As these inherent limitations are known features of the disclosure and financial reporting processes, it is possible to design into the processes safeguards to reduce, though not eliminate, these risks. These inherent limitations include the realities that judgments in decision-making can be faulty and that breakdowns occur because of simple error or mistake. Controls can also be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the control. The design of any system of controls is based in part upon certain assumptions about the likelihood of future events. While our disclosure controls and procedures and our internal control over financial reporting are designed to provide reasonable assurance of achieving their objectives, there can be no assurance that any design will succeed in achieving its stated goals under all future conditions. Over time, controls may become inadequate because of changes in conditions or deterioration in the degree of compliance with the policies or procedures. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

Changes in Internal Control over Financial Reporting

There have been no changes in our internal control over financial reporting that occurred during the three months ended March 31, 2021 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

We are not party to any material pending legal proceedings. From time to time, we may be involved in legal proceedings arising in the ordinary course of business.

ITEM 1A. RISK FACTORS

There have been no material changes to the risk factors as previously disclosed in Part I, Item 1A of the 2020Annual Report.

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

None.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

Not applicable.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

None.

ITEM 6. EXHIBITS

Exhibit number		Description of Document
3.1		Seventh Amended and Restated Certificate of Incorporation, as amended (incorporated by reference to Exhibit 3.1 to the Company's Quarterly Report on Form 10-Q filed August 9, 2017).
3.2		Fourth Certificate of Amendment of the Seventh Amended and Restated Certificate of Incorporation (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed May 22, 2020).
3.3		Fourth Amended and Restated Bylaws (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed December 15, 2020).
10.1#		Letter Agreement between the Company and Sung Lee dated as of January 22, 2021 (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed January 28, 2021).
10.2+		Ninth Amendment to Triple Net Laboratory Lease between the Company and Point Richmond R&D Associates II, LLC, dated January 4, 2021.
10.3#+		Letter Agreement between the Company and Jason Fontenot dated as of January 28, 2019
10.4#+		Letter Agreement between the Company and Robert J. Schott dated as of January 6, 2021
31.1+		Rule 13a — 14(a) Certification of Principal Executive Officer.
31.2+		Rule 13a — 14(a) Certification of Principal Financial Officer.
32.1+	*	Certifications Pursuant to 18 U.S.C. Section 1350.
101.INS		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.
101.SCH		Inline XBRL Taxonomy Extension Schema Document
101.CAL		Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF		Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB		Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE		Inline XBRL Taxonomy Extension Presentation Linkbase Document
104		The cover page from Sangamo's Quarterly Report on Form 10-Q for the three months ended March 31, 2021 is formatted in Inline XBRL and it is contained in Exhibit 101

* The certifications attached as Exhibit 32.1 accompany this Quarterly Report on Form 10-Q pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, and shall not be deemed "filed" by the Registrant for purposes of Section 18 of the Securities Exchange Act of 1934, as amended.

\# Indicates management contract or compensatory plan or arrangement.

\+ Filed herewith.

SIGNATURES

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

Dated: May 4, 2021

SANGAMO THERAPEUTICS, INC.

/s/ ALEXANDER D. MACRAE

Alexander D. Macrae
President and Chief Executive Officer
(Duly Authorized Officer and Principal Executive Officer)

/s/ PRATHYUSHA DURAIBABU

Prathyusha Duraibabu
Vice President, Finance
(Principal Financial and Accounting Officer)

NINTH AMENDMENT TO LEASE

THIS NINTH AMENDMENT TO LEASE (this "**Ninth Amendment**") is entered into as of January 4, 2021, by and between POINT RICHMOND R&D ASSOCIATES II, LLC, a California limited liability company ("**Landlord**"), and SANGAMO THERAPEUTICS, INC., a Delaware corporation (formerly known as Sangamo Biosciences, Inc., a Delaware corporation) ("**Tenant**"), with reference to the following facts:

Recitals

A. Landlord and Tenant entered into that certain Triple Net Laboratory Lease dated as of May 23, 1997, together with an Addendum thereto dated May 28, 1997 (collectively, the "**Original Lease**"), as amended by those certain letter agreements dated June 15, 1999, April 21, 2000 and November 3, 2000, that certain First Amendment to Lease dated March 12, 2004 (the "**First Amendment**"), that certain Lease Addendum dated December 12, 2006, that certain Second Amendment to Lease dated March 15, 2007, that certain Lease Addendum III dated April 2, 2012 , that certain Third Amendment to Lease dated August 1, 2013 (the "**Third Amendment**"), that certain Lease Addendum dated December 1, 2013, that certain Fourth Amendment to Lease dated June 10, 2016, that certain Fifth Amendment to Lease dated July 10, 2017 (the "**Fifth Amendment**"), that certain Sixth Amendment to Lease dated May 11, 2018 (the "**Sixth Amendment**"), that certain Seventh Amendment to Lease dated May 20, 2020 (the "**Seventh Amendment**"), and that certain Eighth Amendment to Lease dated May 29, 2020, pursuant to which Tenant leases certain premises consisting of approximately 46,488 rentable square feet known as Suites A, B, C-1, C-2, F, G, H and J (the "**Original Premises**"), in the building located at 501 Canal Boulevard, Point Richmond, California (the "**Building**"). The Original Lease, as so amended, is collectively referred to herein as the "**Existing Lease**".

B. Tenant has requested that additional space containing approximately 5,000 rentable square feet described as Suite K within the Building as shown on Exhibit A hereto (the "**Suite K Expansion Space**") be added to the Original Premises, and that the Existing Lease be appropriately amended, and Landlord is willing to do the same on the following terms and conditions.

NOW THEREFORE, in consideration of the foregoing and for other good and valuable consideration, the receipt and adequacy are hereby acknowledged, Landlord and Tenant hereby agree as follows:

Agreement

a. Definitions; Recitals. Unless otherwise specified herein, all capitalized terms used in this Ninth Amendment are used as defined in the Existing Lease. The parties acknowledge the truthfulness of the foregoing Recitals, which are hereby incorporated into this Ninth Amendment.

b. Inconsistencies. To the extent that there are any inconsistencies between the terms of the Existing Lease and this Ninth Amendment, the terms of this Ninth Amendment shall control.

c. Expansion and Effective Date. Effective as of the later of (i) February 1, 2021, and (ii) the date the Suite K Expansion Space is delivered to Tenant in the condition required by this Ninth Amendment (the "**Suite K Expansion Effective Date**"), the Premises, as defined in the Existing Lease, is increased from approximately 46,488 rentable square feet to approximately 51,488 rentable square feet by the addition of the Suite K Expansion Space, and from and after the Suite K Expansion Effective Date, the Original Premises and the Suite K Expansion Space, collectively, shall be deemed the Premises, as defined in the Existing Lease, for all purposes under the Existing Lease, including, without limitation, Section 8 of the First Amendment (as amended by Section 2 of the Third Amendment, Section 14 of the Fifth Amendment, and Section 6 of the Sixth Amendment). The Term for the Suite K Expansion Space shall commence on the Suite K Expansion Effective Date and end on the Second Extended Expiration Date (as defined in the Sixth Amendment) (hereinafter, the "**Termination Date**"); provided, however, the Suite K Expansion Effective Date shall be delayed to the extent that Landlord fails to deliver possession of the Suite K Expansion Space for any reason (other than Tenant's early occupancy of the Suite K Expansion Space pursuant to Section 7 below), including but not limited to, holding over by the current tenant; provided, however, that Landlord will use commercially reasonable efforts to deliver the Suite K Expansion Space to Tenant by February 1, 2021 (the "**Target Suite K Expansion Effective Date**"). Additionally, if the Suite K Expansion Effective Date has not occurred by April 1, 2021 (which date may be extended, but not past June 1, 2021, due to delays caused by Force Majeure events, as defined in this Section 3 below), Tenant may terminate this Ninth Amendment (but not the Existing Lease) by providing notice to Landlord within ten (10) days after such date. A "**Force Majeure**" event is any accident, casualty, act of God, war or civil commotion, strike or labor troubles, or any cause whatsoever beyond the reasonable control of Landlord, including water shortages, energy shortages or governmental preemption in connection with an act of God, a national emergency, or by reason of Law, or by reason of the conditions of supply and demand which have been or are affected by act of God, war or other emergency. Except as provided above, any such delay in the Suite K Expansion Effective Date shall not subject Landlord to any liability for any loss or damage resulting therefrom. The Suite K Expansion Space is subject to all the terms and conditions of the Existing Lease except as expressly modified herein and except that Tenant shall not be entitled to receive any allowances, abatements or other financial concessions granted with respect to the Original Premises except as otherwise expressly provided for herein.

d. Base Monthly Rent. In addition to Tenant's obligation to pay Base Monthly Rent for the Original Premises, commencing on the Suite K Expansion Effective Date, Tenant shall pay Landlord Base Monthly Rent for the Suite K Expansion Space as follows:

Period	Base Monthly Rent
02/01/21 – 08/31/21	$12,500.00
09/01/21 – 08/31/22	$12,813.00
09/01/22 – 08/31/23	$13,133.00
09/01/23 – 08/31/24	$13,461.00
09/01/24 – 08/31/25	$13,798.00
09/01/25 – 08/31/26	$14,143.00

All such Base Monthly Rent shall be payable by Tenant in accordance with the terms of the Existing Lease.

Landlord and Tenant acknowledge that the foregoing schedule is based on the assumption that the Suite K Expansion Effective Date is the Target Suite K Expansion Effective Date. If the Suite K Expansion Effective Date is other than the Target Suite K Expansion Effective Date, the schedule set forth above with respect to the payment of any installment(s) of Base Monthly Rent for the Suite K Expansion Space shall be appropriately adjusted on a per diem basis to reflect that the payment of any installment(s) of Base Monthly Rent commences on the actual Suite K Expansion Effective Date, and the actual Suite K Expansion Effective Date shall be set forth in a confirmation letter to be prepared by Landlord. However, the effective date of any increases or decreases in the Base Monthly Rent rate shall not be postponed as a result of an adjustment of the Suite K Expansion Effective Date as provided above.

e. Operating Expenses. For the period commencing with the Suite K Expansion Effective Date, Tenant shall pay for Tenant's Pro Rata Share of Operating Expenses applicable to the Suite K Expansion Space in accordance with the terms of the Existing Lease. As of the Suite K Expansion Effective Date as to Suite K Expansion Space and ending as of the Second Extended Expiration Date, Tenant's Pro Rata Share of Operating Expenses (exclusive of Taxes) shall not increase by more than 5% per calendar year on a compounding and cumulative basis (e.g., Tenant's Pro Rata Share of Operating Expenses (other than Taxes) for calendar year 2022 shall not exceed 105% of Tenant's Pro Rata Share of Operating Expenses (other than Taxes) for 2021; Tenant's Pro Rata Share of Operating Expenses (other than Taxes) for calendar year 2023 shall not exceed 105% of the maximum allowable amount of Tenant's Pro Rata Share of Operating Expenses (other than Taxes) permitted for 2022, etc.). For the period commencing with the Suite K Expansion Effective Date and continuing through the Second Extended Expiration Date, Tenant's Pro Rata Share for the Premises (including the Suite K Expansion Space) is 63.32%.

f. Improvements to Suite K Expansion Space.

(i)*Condition of Suite K Expansion Space*. Tenant has inspected the Suite K Expansion Space and agrees to accept the same "as is" without any agreements, representations, understandings or obligations on the part of Landlord to perform any alterations, repairs or improvements, except as may be expressly provided otherwise in this Ninth Amendment.

Landlord represents and warrants that the structural components of, and mechanical, electrical, plumbing and drainage systems within and serving, the Suite K Expansion Space are, and will be as of the Suite K Expansion Effective Date, in good working order and free from defects. Should Tenant determine that there is any noncompliance with the foregoing representation and provide Landlord with a written notice thereof, Landlord shall promptly after receipt of written notice from Tenant setting forth with specificity the nature and extent of such noncompliance, rectify the same; such noncompliance shall not, however, entitle Tenant to an abatement of rent or to terminate the Lease, or otherwise release Tenant from any of Tenant's obligations under the Lease.

(ii)*Demising of Suite K Expansion Space*. Prior to the Suite K Expansion Effective Date, Landlord shall separately demise the Suite K Expansion Space (the "**Suite K Expansion Space Demising Work**"). Tenant acknowledges and agrees that Landlord may complete the Suite K Expansion Space Demising Work (which shall include finishing all walls and trim, including painting) subsequent to the Suite K Expansion Effective Date; provided, however, that Landlord shall use commercially reasonable efforts to complete all of the Suite K Expansion Space Demising Work by the Suite K Expansion Effective Date (and, for the avoidance of doubt, at a minimum the Suite K Expansion Space must be physically demised by a wall as a condition of the occurrence of the Suite K Expansion Effective Date), and if it is not so completed, Landlord will use commercially reasonable efforts to complete all of the Suite K Expansion Space Demising Work as soon as possible after the Suite K Expansion Effective Date. Landlord and Tenant agree to cooperate with each other in order to enable the Suite K Expansion Space Demising Work to be performed in a timely manner and with as little inconvenience to the operation of Tenant's business as is reasonably possible. Notwithstanding anything herein to the contrary, subject to Section 3 above, any delay in the completion of the Suite K Expansion Space Demising Work or inconvenience suffered by Tenant during the performance of the Tenant Improvements shall not subject Landlord to any liability for any loss or damage resulting therefrom (other than as a result of Landlord's gross negligence or willful misconduct) or entitle Tenant to any credit, abatement or adjustment of Rent or other sums payable under the Lease. Landlord shall make commercially reasonable efforts to minimize disruption of Tenant's use and enjoyment of the Premises during such period; provided, however, that such efforts shall not require Landlord to complete the Suite K Expansion Space Demising Work outside of standard business hours for the Building unless Tenant pays for the additional cost thereof. Tenant shall be responsible for all costs of removing and repositioning its furniture, equipment and other personal property in the Suite K Expansion Space, if any, in order to accommodate the completion of the Suite K Expansion Space Demising Work.

(iii)*Responsibility for Improvements to Suite K Expansion Space*. Tenant may perform improvements to the Suite K Expansion Space in accordance with Section 7.3 of the Existing Lease and at Tenant's sole cost; provided, however, that Landlord shall not unreasonably withhold its consent to any proposed Alterations. Landlord shall respond to any request by Tenant for approval of proposed Alterations within seven (7) business days, and if Landlord disapproves of the proposed Alterations, it shall provide Tenant with written notice of the reason for such disapproval. If within such seven (7) business day period, Landlord informs Tenant that Landlord has submitted the proposed Alterations to an outside third party for review,

then Landlord shall make diligent, good faith efforts to have such outside third-party review completed, and to deliver to Tenant an approval or any written notice of additional required revisions to or comments regarding the proposed Alterations, within not less than twenty (20) business days. In the event Landlord fails to respond to Tenant's request for approval of the proposed Alterations within the original seven (7) business day period, Tenant shall send a reminder notice to Landlord, and if Landlord fails to respond to the reminder notice within three (3) business days after receipt thereof, the proposed Alterations shall be deemed approved. Provided that Tenant is not in breach of any of its obligations under the Existing Lease beyond any notice or cure period(s), Tenant shall be entitled to an allowance (the "**Suite K Expansion Space Improvement Allowance**") in an amount not to exceed the sum of $150,000.00 (i.e., $30.00 per rentable square foot of the Suite K Expansion Space) for the costs (the "**Suite K Expansion Space Improvement Costs**") relating to the design, permitting and construction of Tenant's improvements which are permanently affixed to the Suite K Expansion Space (the "**Suite K Expansion Space Work**"). As used herein the term "Suite K Expansion Space Improvement Costs" shall mean payments to contractors, subcontractors, architects, engineers and material suppliers for services, labor and materials with respect to the Suite K Expansion Space Work. Landlord shall be entitled to deduct from the Suite K Expansion Space Improvement Allowance a construction management fee for Landlord's oversight of the improvements in an amount equal to 3% of the total hard costs of the improvements. The Suite K Expansion Space Improvement Allowance (or so much of same as qualifies for disbursement under this Section 6(b)) shall be paid to Tenant in a single-lump sum following the date that Tenant has satisfied all of the following conditions: (i) Tenant has delivered to Landlord reasonable evidence of the amounts so incurred and paid by Tenant in connection with the refurbishment of the Suite K Expansion Space; (ii) Tenant shall have provided Landlord the final unconditional lien waivers and releases from all parties providing labor or materials on behalf of Tenant at the Suite K Expansion Space in a form reasonably satisfactory to Landlord; (iii) Tenant shall have provided as-built drawings (.pdf and CAD formats) for the Suite K Expansion Space Work; and (iv) the Suite K Expansion Space Work shall have been completed in compliance with the requirements imposed on Alterations pursuant to Section 7.3 of the Existing Lease. If Tenant does not submit a request for disbursement of the entire Suite K Expansion Space Improvement Allowance in accordance with the provisions contained in this Section 7(b) by January 31, 2022, the Suite K Expansion Space Improvement Expansion Space Improvement Allowance, or any unused portion thereof, shall be forfeited and shall accrue for the sole benefit of Landlord; provided however that such date shall be extended on a day for day basis for (x) each day following February 1, 2021 until the Suite K Expansion Effective Date, and (y) each day following the Suite K Expansion Effective Date where construction of the Suite K Expansion Space Work would not be permitted in the Suite K Expansion Space as a result of applicable governmental laws, regulations, orders, directives or similar governmental action.

g. Early Access to Suite K Expansion Space. Landlord shall use commercially reasonable efforts to provide Tenant access to the Suite K Expansion Space as of January 1, 2021, for the sole purpose of having its architects and contractors inspect the Suite K Expansion Space in preparation for Tenant performing Alterations therein. Tenant acknowledges and agrees that: (a) Tenant shall make commercially reasonable efforts to not disturb the occupancy of NCE in its premises within the Building during any early occupancy of the Suite K Expansion

Space, and (b) Landlord is not obligated to separately demise the Suite K Expansion Space until the Suite K Expansion Effective Date. During any period that Tenant shall be permitted to enter the Suite K Expansion Space prior to the Suite K Expansion Effective Date, Tenant shall comply with all terms and provisions of the Existing Lease, except those provisions requiring payment of Base Monthly Rent or Additional Rent as to the Suite K Expansion Space. If Tenant takes possession and occupies the Suite K Expansion Space prior to the Suite K Expansion Effective Date for any reason whatsoever (other than the performance of work in the Suite K Expansion Space with Landlord's prior approval), such possession shall be subject to all the terms and conditions of the Existing Lease and this Ninth Amendment, and Tenant shall pay Base Monthly Rent and Additional Rent as applicable to the Suite K Expansion Space to Landlord on a per diem basis for each day of occupancy prior to the Suite K Expansion Effective Date.

h. Parking. For the period commencing with the Suite K Expansion Effective Date and continuing through the Second Extended Expiration Date, in addition to the parking spaces available to Tenant for the Existing Premises in accordance with the Existing Lease, Tenant shall be entitled to up to fifteen (15) unreserved off-street parking spaces (i.e., 3 spaces per 1,000 rentable square feet of the Suite K Expansion Space) in the surface lot serving the Building at no additional cost to Tenant.

i. Inspection by a CASp in Accordance with Civil Code Section 1938. Pursuant to California Civil Code Section 1938, Landlord hereby notifies Tenant that as of the Effective Date, the Premises have not undergone inspection by a "Certified Access Specialist" ("**CASp**") to determine whether the Premises meet all applicable construction-related accessibility standards under California Civil Code Section 55.53. Landlord hereby discloses pursuant to California Civil Code Section 1938 as follows: "A Certified Access Specialist (CASp) can inspect the subject premises and determine whether the subject premises comply with all of the applicable construction-related accessibility standards under state law. Although state law does not require a CASp inspection of the subject premises, the commercial property owner or lessor may not prohibit the lessee or tenant from obtaining a CASp inspection of the subject premises for the occupancy or potential occupancy of the lessee or tenant, if requested by the lessee or tenant. The parties shall mutually agree on the arrangements for the time and manner of the CASp inspection, the payment of the fee for the CASp inspection, and the cost of making any repairs necessary to correct violations of construction-related accessibility standards within the premises."

j. OFAC. Tenant represents and warrants to Landlord that Tenant is currently in compliance with and shall at all times during the Term of the Existing Lease remain in compliance with the regulations of the Office of Foreign Asset Control ("OFAC") of the Department of the Treasury and any statute, executive order (including the September 24, 2001, Executive Order Blocking Property and Prohibiting Transactions with Persons Who Commit, Threaten to Commit, or Support Terrorism), or other governmental action relating thereto.

k. Miscellaneous.

(i)This Ninth Amendment sets forth the entire agreement between the parties with respect to the matters set forth herein. There have been no additional oral or written

representations or agreements with regard to the subject matter of this Ninth Amendment. Under no circumstances shall Tenant be entitled to any Rent abatement, improvement allowance, leasehold improvements, or other work to the Premises, or any similar economic incentives that may have been provided Tenant in connection with entering into the Existing Lease, unless specifically set forth in this Ninth Amendment.

(ii)Except as herein modified or amended, the provisions, conditions and terms of the Existing Lease shall remain unchanged and in full force and effect.

(iii)Submission of this Ninth Amendment by Landlord is not an offer to enter into this Ninth Amendment but rather is a solicitation for such an offer by Tenant. Neither Landlord nor Tenant shall be bound by this Ninth Amendment until each of Landlord and Tenant has executed this Ninth Amendment and delivered the same to the other party.

(iv)Tenant hereby represents to Landlord that Tenant has dealt with no broker in connection with this Ninth Amendment. Tenant agrees to indemnify and hold Landlord, its members, principals, beneficiaries, partners, officers, directors, employees, mortgagee(s) and agents, and the respective principals and members of any such agents (collectively, the "**Landlord Related Parties**") harmless from all claims of any brokers claiming to have represented Tenant in connection with this Ninth Amendment. Landlord hereby represents to Tenant that Landlord has dealt with no broker in connection with this Ninth Amendment. Landlord agrees to indemnify and hold Tenant, its members, principals, beneficiaries, partners, officers, directors, employees, and agents, and the respective principals and members of any such agents (collectively, the "**Tenant Related Parties**") harmless from all claims of any brokers claiming to have represented Landlord in connection with this Ninth Amendment.

(v)This Ninth Amendment shall be binding upon and inure to the benefit of the parties, their respective heirs, legal representatives, successors and assigns. Each party hereto and the persons signing below warrant that the person signing below on such party's behalf is authorized to do so and to bind such party to the terms of this Ninth Amendment.

(vi)This Ninth Amendment may be executed in counterparts each of which counterparts when taken together shall constitute one and the same agreement. Any facsimile, PDF or other electronic signature shall constitute a valid and binding method for executing this Ninth Amendment. Executed counterparts of this Ninth Amendment exchanged by facsimile transmission, PDF email, or other electronic means shall be fully enforceable.

IN WITNESS WHEREOF, the parties have executed this Ninth Amendment as of the date set forth above.

Landlord: POINT RICHMOND R&D ASSOCIATES II, LLC,
a California limited liability company

By: Wareham-NZL, LLC, its Manager

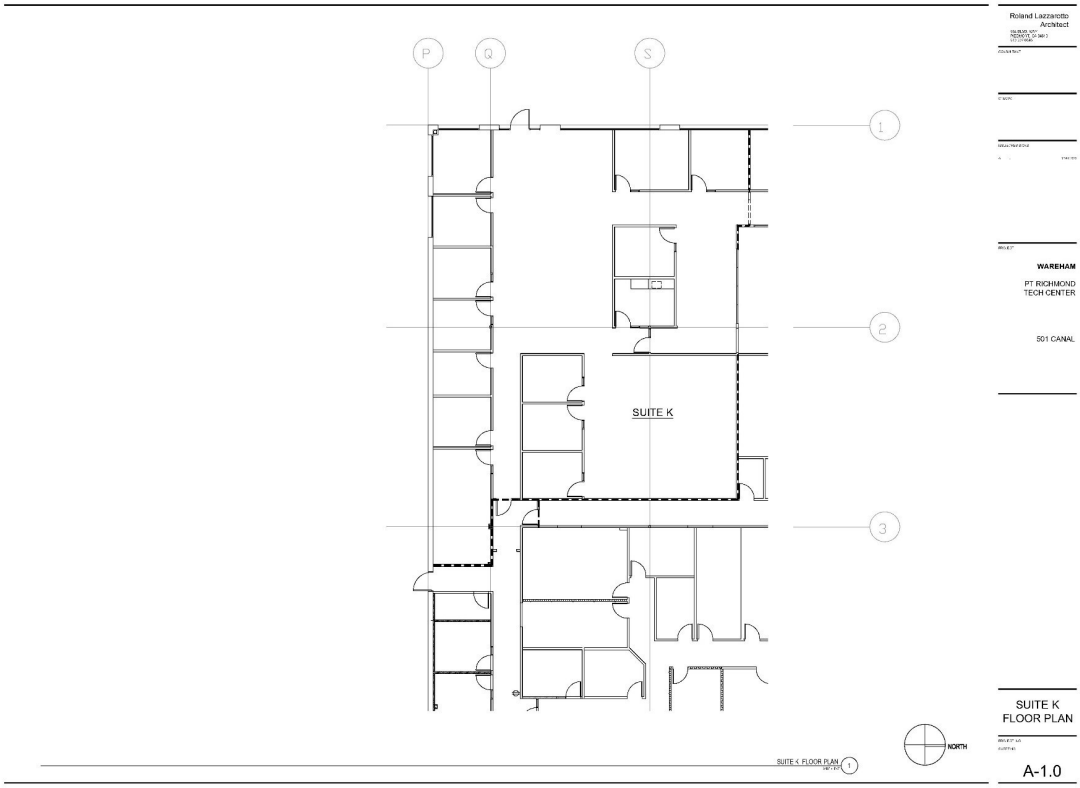
By: _____
Richard K. Robbins
Its Manager

Tenant: SANGAMO THERAPEUTICS, INC.,
a Delaware corporation

By:
Name:
Title:

EXHIBIT A

OUTLINE AND LOCATION OF SUITE K EXPANSION SPACE



EXECUTIVE EMPLOYMENT AGREEMENT

Employment Agreement ("Agreement") made as of the 28th day of January 2019 by and between Sangamo Therapeutics, Inc., a Delaware corporation (the "Company"), and Jason D. Fontenot ("Executive") (collectively, the "Parties").

RECITALS

WHEREAS, the Company desires to employ Executive, and Executive desires to be employed by the Company, on the terms and conditions set forth in this Agreement.

NOW, THEREFORE, in consideration of the mutual promises set forth herein, the Parties agree follows:

1. **Employment.**

The Company hereby agrees to employ Executive and Executive hereby agrees to accept such employment, on the terms and conditions set forth in this Agreement, with a start date of February 28, 2019 (the "Effective Date").

2. **At-Will Employment.**

Executive shall be employed on an at-will basis. Either Executive or the Company may terminate employment at any time, with or without cause, and with or without advance notice.

3. **Position, Duties and Obligations.**

(a) Executive shall be appointed as the Senior Vice President, Cell Therapy. Executive shall serve in such position, and in such other positions as the Board and the Company may from time to time reasonably determine, subject at all times to the direction, supervision and authority of the Executive Vice President, Research and Development. During his employment, Executive shall report solely and directly to the Executive Vice President, Research and Development.

(b) During Executive's employment, Executive shall perform Executive's duties faithfully and to the best of Executive's ability and shall devote substantially all of Executive's business time, attention, knowledge, skills and interests to the business of the Company (and its subsidiaries).

(c) During Executive's employment, Executive shall not, whether directly or indirectly, render any services of a commercial or professional nature to any other person or organization, whether for compensation or otherwise, without the prior written consent of the Executive Vice President, Research and Development.

(d) The foregoing in this Section 3 shall not preclude Executive from serving on any corporate, civic or charitable boards or committees on which Executive is serving as of the Effective Date and discloses to the Executive Vice President, Research and Development prior to the Effective Date or on which Executive commences service following such date with

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the Executive Vice President, Research and Development's prior written approval, so long as such activities do not interfere with the performance of Executive's responsibilities hereunder.

(e) Executive's principal place of business will be located in Richmond, California.

(f) Executive represents that Executive may enter into this Agreement, and as of the Effective Date, 1) accept employment with the Company under the terms of this Agreement, and 2) perform the duties and responsibilities contemplated by this Agreement without violating any other agreement or agreements with other parties including but not limited to and any prior employers.

4. **Compensation and Benefits.**

(a) **Base Compensation**. The Company shall pay to Executive an annual base salary of Three Hundred Fifty Thousand Dollars ($350,000), prorated for any partial employment period and payable in equal monthly installments in accordance with the Company's payroll schedule. The Compensation Committee of the Board shall annually review the then-current level of Executive's base salary (for increase only) to determine the amount, if any, of change to such salary.

(b) **Annual Performance Bonus**. Executive is eligible to earn an annual performance bonus commencing with the 2019 calendar year performance period. The target amount of Executive's annual cash bonus shall be thirty-five percent (35%) of Executive's annual base salary. The Board shall have sole discretion to determine whether any annual cash bonus will be paid based upon achievement of both corporate objectives and Executive's personal objectives, and the reasonable discretion to determine that actual amount of any such bonus. Executive must be an employee in good standing on the date that the Board makes such determination in order to earn any such bonus, which determination shall be made by the Board no later than March 31 of the calendar year first following the performance period calendar year. The actual bonus may be more or less than the target amount based upon the Company's achievement over the year. Any bonus to which Executive becomes entitled for a particular calendar year shall be paid in accordance with the terms of the applicable bonus plan, but in no event later than the second payroll period following such Board determination. The Compensation Committee of the Board shall annually review Executive's then target amount for the annual cash bonus (for increase only) to determine the amount, if any, of change to such target amount.

(c) **Executive Severance Plan**. Executive shall be deemed an Eligible Employee and an Executive Officer and entitled to receive certain severance benefits under the Sangamo Therapeutics, Inc. Executive Severance Plan dated March 14, 2017 (the "Severance Plan") subject to the terms and conditions of the Severance Plan. A copy of the Severance Plan has been provided to Executive concurrently with this Agreement. Notwithstanding the foregoing, in the event that the Company withdraws this offer after it is signed by Executive or terminates this Agreement prior to the Effective Date for any reason other than Executive's failure to successfully pass the requirements for a background check clearance, satisfactory reference check, and satisfactory proof of Executive's legal right to work in the United States required under Section 8(a) herein, then Executive shall be entitled to severance under the

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Severance Plan as though his employment was terminated by the Company other than for Cause to the same extent as he would otherwise be entitled had such termination occurred after the Effective Date; provided, however, that Executive shall not be entitled to such severance if he has not notified his current employer of his intent to resign his employment at the time the Company informs him of the withdrawal or termination of this Agreement.

(d) **Benefits**. Executive will be entitled to the employee benefits generally provided to other executive officers of the Company pursuant to the terms of the applicable benefit plans. Executive will not be subject to a formal paid time off program. Executive is free to take paid time off from work for vacation, medical appointments, and other short-term ansences due to illnesses or other personal reasons. If Executive desires to to take time off for a duration longer than two (2) weeks manager approval is required. Unlimited paid time off is available from the first day of employment.

(e) **Equity**. Effective as of March 25, 2019 or the trading day immediately preceding March 25, 2019 in the event March 25, 2019 is not a trading day (the "Grant Date"), the Compensation Committee of the Board shall grant Executive a non-statutory stock option to purchase up to 100,000 shares of the Company's Common Stock with an exercise price per share equal to the fair market value of the Company's Common Stock on the Grant Date (the "Option") under the Company's 2018 Equity Incentive Plan (the "Plan"). The Option will be evidenced by the standard stock option agreement under the Plan and will be subject to the terms and conditions of that agreement and the Plan, with one-quarter of the Option shares vesting twelve (12) months from the Grant Date and the remainder vesting in equal monthly installments for thirty-six (36) months thereafter, provided Executive remains a full-time employee through each such vesting date. Vesting of the Option and any subsequent equity grants will cease upon termination of Executive's service by either party for any reason.

Also, subject to approval by the Board or a committee or individual to whom the Board has delegated authority to grant restricted stock units, we intend to grant you 10,000 restricted stock units ("Restricted Stock Units") under the Plan. Each Restricted Stock Unit represents the right to receive one share of the Company's common stock upon the specified issuance date following vesting. Your Restricted Stock Units will vest in a series of three (3) successive equal annual installments upon your completion of each year of service to the Company measured from the Grant Date. The issuance of the underlying shares of common stock in settlement of vested Restricted Stock Units will be subject to the Company's collection of all applicable withholding taxes. The Restricted Stock Units will be evidenced by the Plan's form of Restricted Stock Unit Issuance Agreement and will be subject to its terms and conditions and the Plan.

(f) **Clawback**. Notwithstanding anything to the contrary in this Agreement, all compensation paid to Executive by the Company (whether payable pursuant to this Agreement or otherwise) will be subject to reduction, recovery and/or recoupment to the extent required by any present or future law, government regulation or stock exchange listing requirement (or any policy adopted by the Company which ensures compliance with the requirements of any such law, government regulation or stock exchange listing requirement).

(g) **Resignation from Positions**. Notwithstanding any other provision of this Agreement to the contrary, upon any termination of employment (whether voluntary or

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involuntary), Executive, upon written request from the Board, shall immediately resign from any positions Executive has with the Company (or any subsidiary), whether as an executive, officer, employee, consultant, director, trustee, fiduciary or otherwise.

5. **Confidentiality**. Executive agrees to abide by the terms and conditions of the Employee Confidential Information and Invention Assignment Agreement between Executive and the Company, a copy of which is attached as Exhibit A. Executive further agrees that at all times both during Executive's employment by the Company and after Executive's employment ends, Executive will keep in confidence and trust, and will not use or disclose, except as directed by the Company, any confidential or proprietary information of the Company.

6. **Tax Withholdings**. Any and all cash compensation and other benefits (including without limitation, base salary, annual bonus and sign-on bonus) paid to Executive under this Agreement shall be subject to all applicable tax withholding requirements, and the Company shall make such other deductions as may be required and/or allowed by applicable law and/or as authorized in writing by Executive.

7. **Arbitration**. Any dispute, controversy, or claim, whether contractual or non-contractual, between Executive and the Company shall be resolved by binding arbitration before the Judicial Arbitration and Mediation Service (the "JAMS"), in accordance with the JAMS Employment Arbitration Rules and Procedures, available at www.jamsadr.com. Executive and the Company each agree that before proceeding to arbitration, they will mediate disputes before the JAMS by a mediator approved by the JAMS. If mediation fails to resolve the matter, any subsequent arbitration shall be conducted by an arbitrator approved by the JAMS and mutually acceptable to Executive and the Company. All disputes, controversies, and claims shall be conducted by a single arbitrator, who shall: (i) allow discovery authorized by California Code of Civil Procedure Section 1282, et seq., or any other discovery required by applicable law; and (ii) issue a written award that sets forth the essential findings of fact and conclusions of law on which the award is based. The arbitrator shall have the authority to award any relief authorized by law in connection with the asserted claims or disputes. Judgment upon the arbitrator's award may be entered in any court having jurisdiction thereof. If Executive and the Company are unable to agree on the mediator or the arbitrator, then the JAMS shall select the mediator/arbitrator. The resolution of the dispute by the arbitrator shall be final, binding, non-appealable, and fully enforceable by a court of competent jurisdiction under the Federal Arbitration Act. The arbitration award shall be in writing and shall include a statement of the reasons for the award. The arbitration shall be held in San Francisco, California. The Company shall pay all JAMS, mediation, and arbitrator's fees and costs, irrespective of who raised the claim and the outcome of arbitration.

8. **Miscellaneous**.

(a) **Conditions to Agreement**. This Agreement is contingent upon a background check clearance, satisfactory reference check, and satisfactory proof of Executive's legal right to work in the United States. Executive agrees to provide any documentation or information at the Company's request to facilitate these processes.

(b) **Governing Law**. This Agreement shall be interpreted, construed, governed and enforced according to the laws of the State of California.

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(c) **Attorneys' Fees**. In the event of any controversy, claim or dispute between the parties, arising out of or relating to this Agreement or the breach hereof, or the interpretation hereof, each party shall bear its own legal fees and expenses. Notwithstanding the foregoing, in the event of a finding by any court having jurisdiction over such matter that any party initiating an action under this Agreement failed to have a reasonable prospect of prevailing on its claim, the arbitrator shall have discretion to award the prevailing party attorneys' fees and costs incurred by it with respect to such claim or action. The "prevailing party" means the party determined by the arbitrator to have most nearly prevailed, even if such party did not prevail in all matters, not necessarily the one in whose favor a judgment is rendered.

(d) **Amendments**. No amendment or modification of the terms or conditions of this Agreement shall be valid unless in writing and signed by the Parties hereto.

(e) **Severability**. If any provision of this Agreement as applied to any party or to any circumstance should be adjudged by a court of competent jurisdiction (or determined by the arbitrator) to be void or unenforceable for any reason, the invalidity of that provision shall in no way affect (to the maximum extent permissible by law) the application of such provision under circumstances different from those adjudicated by the court or determined by the arbitrator, the application of any other provision of this Agreement, or the enforceability or invalidity of this Agreement as a whole. Should any provision of this Agreement become or be deemed invalid, illegal or unenforceable in any jurisdiction by reason of the scope, extent or duration of its coverage, then such provision shall be deemed amended to the extent necessary to conform to applicable law so as to be valid and enforceable or, if such provision cannot be so amended without materially altering the intention of the parties, then such provision will be stricken, and the remainder of this Agreement shall continue in full force and effect.

(f) **Successors and Assigns**. The rights and obligations of the Company under this Agreement shall inure to the benefit of and shall be binding upon the successors and assigns of the Company. Executive shall not be entitled to assign any of Executive's rights or obligations under this Agreement.

(g) **Entire Agreement**. This Agreement, along with any other agreements set forth herein, including without limitation, the Proprietary Information and Inventions Agreement, constitutes the entire agreement between the parties with respect to the employment of Executive.

[*Signature Page Follows*]

JDF

SANGAMO THERAPEUTICS, INC.

By: _____
Name:
Title:

JASON D. FONTENOT

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EXHIBIT A

EMPLOYEE CONFIDENTIAL INFORMATION AND INVENTION ASSIGNMENT AGREEMENT

In consideration of my employment or continued employment by Sangamo Therapeutics, Inc. ("Sangamo"), its direct and indirect subsidiaries, parents, affiliates, predecessors, successors and assigns (together with Sangamo, the "**Company**"), and the compensation and benefits provided to me now and during my employment with the Company, I hereby enter into this Employee Confidential Information and Invention Assignment Agreement (the "**Agreement**"), which will be deemed effective as of the first day of my employment with the Company:

1. **CONFIDENTIAL INFORMATION PROTECTIONS.**

1.1 **Recognition of Company's Rights; Nondisclosure.** I understand and acknowledge that my employment by Company creates a relationship of confidence and trust with respect to Company's Confidential Information (as defined below) and that Company has a protectable interest therein. At all times during and after my employment, I will hold in confidence and will not disclose, use, lecture upon, or publish any of Company's Confidential Information, except as such disclosure, use or publication may be required in connection with my work for Company, or unless an officer of Company expressly authorizes such disclosure. I will obtain Company's written approval before publishing or submitting for publication any material (written, oral, or otherwise) that discloses and/or incorporates any Confidential Information. I hereby assign to Sangamo any rights I may have or acquire in such Confidential Information and recognize that all Confidential Information shall be the sole and exclusive property of Sangamo and its assigns. I will take all reasonable precautions to prevent the inadvertent accidental disclosure of Confidential Information. Notwithstanding the foregoing, pursuant to 18 U.S.C. Section 1833(b), I shall not be held criminally or civilly liable under any federal or state trade secret law for the disclosure of a trade secret that: (1) is made in confidence to a federal, state, or local government official, either directly or indirectly, or to an attorney, and solely for the purpose of reporting or investigating a suspected violation of law; or (2) is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal.

1.2 **Confidential Information.** The term **"Confidential Information"** shall mean any and all confidential knowledge, data or information of Company. By way of illustration but not limitation, **"Confidential Information"** includes (a) trade secrets, inventions, mask works, ideas, processes, formulas, software in source or object code versions, data, programs, other works of authorship, know-how, improvements, discoveries, developments, designs and techniques and any other proprietary technology and all Intellectual Property Rights therein (collectively, **"Inventions"**); (b) information regarding research, development, new products, marketing and selling, business plans, budgets and unpublished financial statements, licenses, prices and costs, margins, discounts, credit terms, pricing and billing policies, quoting procedures, methods of obtaining business, forecasts, future plans and potential strategies, financial projections and business strategies, operational plans, financing and capital-raising plans, activities and agreements, internal services and operational manuals, methods of conducting Company business, suppliers and supplier information, and purchasing; (c) information regarding customers and potential customers of Company, including customer lists, names, representatives, their needs or desires with respect to the types of products or services offered by Company, proposals, bids, contracts and their contents and parties, the type and quantity of products and services provided or sought to be provided to customers and potential customers of Company and other non-public information relating to customers and potential customers; (d) information regarding any of Company's business partners and their services, including names, representatives, proposals, bids, contracts and their contents and parties, the type and quantity of products and services received by Company, and other non-public information relating to business partners; (e) information regarding personnel, employee lists, compensation, and employee skills; and (f) any other non-public information which a competitor of Company could use to the competitive disadvantage of Company. Notwithstanding the foregoing, it is understood that, at all such times, I am free to use information which is generally known in the trade or industry through no breach of this Agreement or other act or omission by me. Further, notwithstanding the foregoing or anything to the contrary in this Agreement or any other agreement between the Company and me, nothing in this Agreement shall limit my right to discuss my employment or report possible violations of law or regulation with any federal government agency or similar state or local agency or to discuss the terms and conditions of my employment with others to the extent expressly permitted by Section 7 of the National Labor Relations Act.

1.3 **Third Party Information.** I understand, in addition, that Company has received, and in the future will receive, from third parties their confidential and/or

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proprietary knowledge, data or information (**"Third Party Information"**) subject to a duty on Company's part to maintain the confidentiality of such information and to use it only for certain limited purposes. During my employment and thereafter, I will hold Third Party Information in confidence and will not disclose to anyone (other than Company personnel who need to know such information in connection with their work for Company) or use, except in connection with my work for Company, Third Party Information unless expressly authorized by an officer of Company in writing.

1.4 **No Improper Use of Information of Prior Employers and Others.** During my employment by Company, I will not improperly use or disclose confidential information or trade secrets, if any, of any former employer or any other person to whom I have an obligation of confidentiality, and I will not bring onto the premises of Company any unpublished documents or any property belonging to any former employer or any other person to whom I have an obligation of confidentiality unless consented to in writing by that former employer or person.

2. **ASSIGNMENTS OF INVENTIONS.**

2.1 **Definitions.** As used in this Agreement, the term **"Intellectual Property Rights"** means all trade secrets, Copyrights, trademarks, mask work rights, patents and other intellectual property rights recognized by the laws of any jurisdiction or country; the term **"Copyright"** means the exclusive legal right to reproduce, perform, display, distribute and make derivative works of a work of authorship (as a literary, musical, or artistic work) recognized by the laws of any jurisdiction or country; and the term **"Moral Rights"** means all paternity, integrity, disclosure, withdrawal, special and any other similar rights recognized by the laws of any jurisdiction or country.

2.2 **Excluded Inventions and Other Inventions.** Attached hereto as **Attachment 1** is a list describing all existing Inventions, if any, that may relate to Company's business or actual or demonstrably anticipated research or development and that were made by me or acquired by me prior to the commencement of my employment with, and which are not to be assigned to, Company (**"Excluded Inventions"**). If no such list is attached, I represent and agree that it is because I have no rights in any existing Inventions that may relate to Company's business or actual or demonstrably anticipated research or development. For purposes of this Agreement, **"Other Inventions"** means Inventions in which I have or may have an interest, as of the commencement of my employment, other than Company Inventions (defined below) and Excluded Inventions. I acknowledge and agree that if I use any Excluded Inventions or any Other Inventions in the scope of my employment, or if I include any Excluded Inventions or Other Inventions in any product or service of Company, or if my rights in any Excluded Inventions or Other Inventions may block or interfere with, or may otherwise be required for, the exercise by Company of any rights assigned to Company under this Agreement, I will immediately so notify Company in writing. Unless Company and I agree otherwise in writing as to particular Excluded Inventions or Other Inventions, I hereby grant to Company, in such circumstances (whether or not I give Company notice as required above), a non-exclusive, perpetual, transferable, fully-paid and royalty-free, irrevocable and worldwide license, with rights to sublicense through multiple levels of sublicensees, to reproduce, make derivative works of, distribute, publicly perform, and publicly display in any form or medium, whether now known or later developed, make, have made, use, sell, import, offer for sale, and exercise any and all present or future rights in, such Excluded Inventions and Other Inventions. To the extent that any third parties have rights in any such Excluded Inventions or Other Inventions, I hereby represent and warrant that such third party or parties have validly and irrevocably granted to me the right to grant the license stated above.

2.3 **Assignment of Company Inventions.** Inventions assigned to Sangamo, or to a third party as directed by Sangamo pursuant to Section 2.6, are referred to in this Agreement as **"Company Inventions."** Subject to Section 2.4 (Unassigned or Nonassignable Inventions) and except for Excluded Inventions set forth in **Attachment 1** and Other Inventions, I hereby assign to Sangamo all my right, title, and interest in and to any and all Inventions (and all Intellectual Property Rights with respect thereto) made, conceived, reduced to practice, or learned by me, either alone or with others, during the period of my employment by Company. To the extent required by applicable Copyright laws, I agree to assign in the future (when any copyrightable Inventions are first fixed in a tangible medium of expression) my Copyright rights in and to such Inventions. Any assignment of Company Inventions (and all Intellectual Property Rights with respect thereto) hereunder includes an assignment of all Moral Rights. To the extent such Moral Rights cannot be assigned to Sangamo and to the extent the following is allowed by the laws in any country where Moral Rights exist, I hereby unconditionally and irrevocably waive the enforcement of such Moral Rights, and all claims and causes of action of any kind against Company or related to Company's customers, with respect to such rights. I further acknowledge and agree that neither my successors-in-interest nor legal heirs retain any Moral Rights in any Company Inventions (and any Intellectual Property Rights with respect thereto).

2.4 **Unassigned or Nonassignable Inventions.** I recognize that this Agreement will not be deemed to require assignment of any Invention that is covered under California Labor Code section 2870(a) (the **"Specific**

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Inventions Law"), as detailed on **Attachment 2**.

2.5 **Obligation to Keep Company Informed.** During the period of my employment and for one (1) year after termination of my employment, I will promptly and fully disclose to Company in writing all Inventions authored, conceived, or reduced to practice by me, either alone or jointly with others. In addition, I will promptly disclose to Company all patent applications filed by me or on my behalf within one (1) year after termination of employment. At the time of each such disclosure, I will advise Company in writing of any Inventions that I believe fully qualify for protection under the provisions of the Specific Inventions Law; and I will at that time provide to Company in writing all evidence necessary to substantiate that belief. Company will keep in confidence and will not use for any purpose or disclose to third parties without my consent any confidential information disclosed in writing to Company pursuant to this Agreement relating to Inventions that qualify fully for protection under the Specific Inventions Law. I will preserve the confidentiality of any Invention that does not fully qualify for protection under the Specific Inventions Law.

2.6 **Government or Third Party.** I agree that, as directed by Company, I will assign to a third party, including without limitation the United States, all my right, title, and interest in and to any particular Company Invention.

2.7 **Ownership of Work Product.** I agree that Sangamo will exclusively own all work product that is made by me (solely or jointly with others) within the scope of my employment, and I hereby irrevocably and unconditionally assign to Sangamo all right, title, and interest worldwide in and to such work product. I acknowledge that all original works of authorship which are made by me (solely or jointly with others) within the scope of my employment and which are protectable by Copyright are "works made for hire," pursuant to United States Copyright Act (17 U.S.C., Section 101). I understand and agree that I have no right to publish on, submit for publishing, or use for any publication any work product protected by this Section, except as necessary to perform services for Company.

2.8 **Enforcement of Intellectual Property Rights and Assistance.** I will assist Company in every proper way to obtain, and from time to time enforce, United States and foreign Intellectual Property Rights and Moral Rights relating to Company Inventions in any and all countries. To that end I will execute, verify and deliver such documents and perform such other acts (including appearances as a witness) as Company may reasonably request for use in applying for, obtaining, perfecting, evidencing, sustaining and enforcing such Intellectual Property Rights and the assignment thereof. In addition, I will execute, verify and deliver assignments of such Intellectual Property Rights to Sangamo or its designee, including the United States or any third party designated by Sangamo. My obligation to assist Company with respect to Intellectual Property Rights relating to such Company Inventions in any and all countries will continue beyond the termination of my employment, but Company will compensate me at a reasonable rate after my termination for the time actually spent by me at Company's request on such assistance. In the event Company is unable for any reason, after reasonable effort, to secure my signature on any document needed in connection with the actions specified in this paragraph, I hereby irrevocably designate and appoint Company and its duly authorized officers and agents as my agent and attorney in fact, which appointment is coupled with an interest, to act for and in my behalf to execute, verify and file any such documents and to do all other lawfully permitted acts to further the purposes of this Agreement with the same legal force and effect as if executed by me. I hereby waive and quitclaim to Company any and all claims, of any nature whatsoever, which I now or may hereafter have for infringement of any Intellectual Property Rights assigned under this Agreement to Sangamo.

2.9 **Incorporation of Software Code.** I agree that I will not incorporate into any Company software or otherwise deliver to Company any software code licensed under the GNU General Public License or Lesser General Public License or any other license that, by its terms, requires or conditions the use or distribution of such code on the disclosure, licensing, or distribution of any source code owned or licensed by Company **except** in strict compliance with Company's policies regarding the use of such software.

3. **RECORDS.** I agree to keep and maintain adequate and current records (in the form of notes, sketches, drawings and in any other form that is required by Company) of all Confidential Information developed by me and all Company Inventions made by me during the period of my employment at Company, which records will be available to and remain the sole property of Company at all times.

4. **DUTY OF LOYALTY DURING EMPLOYMENT.** I agree that during the period of my employment by Company I will not, without Company's express written consent, directly or indirectly (a) engage in any other employment or (b) engage in any other activities that are competitive with, or would otherwise conflict with, my employment by Company.

5. **NO SOLICITATION OF EMPLOYEES, CONSULTANTS, OR CONTRACTORS.** I agree that during the period of my employment and for the one (1) year period after the date my employment ends for any reason, including but not limited to voluntary termination by me or involuntary termination by Company, I will not, as an officer, director,

employee, consultant, owner, partner, or in any other capacity, either directly or through others, except on behalf of Company, solicit, induce, encourage, or participate in soliciting, inducing or encouraging any employee, consultant, or independent contractor of Company to terminate his, her or its relationship with Company, even if I did not initiate the discussion or seek out the contact.

6. **REASONABLENESS OF RESTRICTIONS.** I agree that I have read this entire Agreement and understand it. I agree that this Agreement does not prevent me from earning a living or pursuing my career. I agree that the restrictions contained in this Agreement are reasonable, proper, and necessitated by Company's legitimate business interests. I represent and agree that I am entering into this Agreement freely and with knowledge of its contents with the intent to be bound by the Agreement and the restrictions contained in it.

7. **NO CONFLICTING AGREEMENT OR OBLIGATION.** I represent that my employment by Company does not and will not breach any agreement with any former employer or third party, including any noncompete agreement or any agreement to keep in confidence or refrain from using information acquired by me prior to my employment by Company. I further represent that I have not entered into, and will not enter into, any agreement, either written or oral, in conflict with my obligations under this Agreement.

8. **RETURN OF COMPANY PROPERTY.** Subject to the nondisclosure requirements of Section 1.1 above, upon termination of my employment or upon Company's request at any other time, I will deliver to Company any and all of Company's property and equipment and any and all drawings, notes, memoranda, specifications, devices, formulas and documents, together with all copies thereof, and any other material containing or disclosing any Company Inventions, Third Party Information or Confidential Information of Company. I agree that I will not copy, delete, or alter any information contained upon my Company computer or Company equipment before I return it to Company. In addition, if I have used any personal computer, server, or e-mail system to receive, store, review, prepare or transmit any Company information, including but not limited to, Confidential Information, I agree to provide Company with a computer-useable copy of all such Confidential Information and then permanently delete and expunge such Confidential Information from those systems; and I agree to provide Company access to my system as reasonably requested to verify that the necessary copying and/or deletion is completed. I further agree that any property situated on Company's premises and owned by Company, including disks and other storage media, filing cabinets or other work areas, is subject to inspection by Company's personnel at any time with or without notice.

9. **LEGAL AND EQUITABLE REMEDIES.**

9.1 I agree that it may be impossible to assess the damages caused by my violation of this Agreement or any of its terms. I agree that any threatened or actual violation of this Agreement or any of its terms will constitute immediate and irreparable injury to Company, and Company will have the right to enforce this Agreement and any of its provisions by injunction, specific performance or other equitable relief, without bond and without prejudice to any other rights and remedies that Company may have for a breach or threatened breach of this Agreement.

9.2 In the event Company enforces this Agreement through a court or arbitration order, I agree that the restrictions of Sections 5 will remain in effect for a period of twelve (12) months from the effective date of the order enforcing the Agreement.

10. **NOTICES.** Any notices required or permitted under this Agreement will be given to Company at its headquarters location at the time notice is given, and to me at my address as listed on Company payroll, or at such other address as Company or I may designate by written notice to the other. Notice will be effective upon receipt or refusal of delivery. If delivered by certified or registered mail, notice will be considered to have been given five (5) business days after it was mailed, as evidenced by the postmark. If delivered by courier or express mail service, notice will be considered to have been given on the delivery date reflected by the courier or express mail service receipt.

11. **NOTIFICATION OF NEW EMPLOYER.** If I leave the employ of Company, I consent to the notification of my new employer of my rights and obligations under this Agreement, by Company providing a copy of this Agreement or otherwise.

12. **GENERAL PROVISIONS.**

12.1 **Governing Law.** This Agreement will be governed by and construed according to the laws of the State of California as such laws are applied to agreements entered into and to be performed entirely within California between California residents.

12.2 **Severability.** In case any one or more of the provisions, subsections, or sentences contained in this Agreement will, for any reason, be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability will not affect the other provisions of this Agreement, and this Agreement will be construed as if such invalid, illegal or unenforceable provision had never been contained in this Agreement. If moreover, any one or more of the provisions contained in this Agreement will for any reason be held to be excessively broad as to duration, geographical scope, activity or subject, it will be construed by limiting and reducing it, so as to be enforceable to the extent compatible with the applicable law as it will then appear.

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12.3 **Successors and Assigns.** This Agreement is for my benefit and the benefit of Company, its successors, assigns, parent corporations, direct and indirect subsidiaries, affiliates, and purchasers, and will be binding upon my heirs, executors, administrators and other legal representatives.

12.4 **Survival.** This Agreement shall survive the termination of my employment, regardless of the reason, and the assignment of this Agreement by Company to any successor in interest or other assignee.

12.5 **Employment At-Will.** I agree and understand that nothing in this Agreement will change my at-will employment status or confer any right with respect to continuation of employment by Company, nor will it interfere in any way with my right or Company's right to terminate my employment at any time, with or without cause or advance notice.

12.6 **Waiver.** No waiver by Company of any breach of this Agreement will be a waiver of any preceding or succeeding breach. No waiver by Company of any right under this Agreement will be construed as a waiver of any other right. Company will not be required to give notice to enforce strict adherence to all terms of this Agreement.

12.7 **Export.** I agree not to export, reexport, or transfer, directly or indirectly, any U.S. technical data acquired from Company or any products utilizing such data, in violation of the United States export laws or regulations.

12.8 **Entire Agreement.** This Agreement is the final, complete and exclusive agreement of the parties with respect to the subject matter of this Agreement and supersedes and merges all prior discussions between the parties; provided, however, prior to the execution of this Agreement, if Company and I were parties to any agreement regarding the subject matter hereof, that agreement will be superseded by this Agreement prospectively only. No modification of or amendment to this Agreement, or any waiver of any rights under this Agreement, will be effective unless in writing and signed by me and an authorized officer of the Company. Any subsequent change or changes in my duties, salary or compensation will not affect the validity or scope of this Agreement. If no other agreement governs nondisclosure and assignment of inventions during any period in which I was previously engaged or am in the future engaged by Company as an independent contractor, the obligations pursuant to sections of this Agreement titled "Confidential Information Protections" and "Assignment of Inventions" shall apply.

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EMPLOYEE:

I HAVE READ, UNDERSTAND, AND ACCEPT THIS AGREEMENT.

(Signature)

By: Jason Fontenot

Title: _____

Date: February 8, 2019

Address: 5716 Woodlawn Ave N, Seattle WA 98103

SANGAMO THERAPEUTICS, INC.:

ACCEPTED AND AGREED:

_____

(Signature)

By: _____

Title: _____

Date: _____

Address: _____

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ATTACHMENT 1

PRIOR INVENTIONS

TO: **Sangamo Therapeutics, Inc.**

FROM: JASON FONTENOT

DATE: FEB 8, 2019

SUBJECT: **Prior Inventions**

1. Except as listed in Section 2 below, the following is a complete list of all inventions or improvements relevant to the subject matter of my employment by Sangamo Therapeutics, Inc. ("**Company**") that have been made or conceived or first reduced to practice by me alone or jointly with others prior to my engagement by Company:

☐ No inventions or improvements.

☐ See below:

_____

_____

_____

☐ Additional sheets attached.

2. Due to a prior confidentiality agreement, I cannot complete the disclosure under Section 1 above with respect to inventions or improvements generally listed below, the intellectual property rights and duty of confidentiality with respect to which I owe to the following party(ies):

	Invention or Improvement	**Party(ies)**	**Relationship**
1.	CRISPR-CAS9 editing of CBLB in T cells for immunotherapy.	Juno Therapeutics.	Former Employer
2.			
3.			

☐ Additional sheets attached.

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ATTACHMENT 2

LIMITED EXCLUSION NOTIFICATION

This is to notify you in accordance with Section 2872 of the California Labor Code that the foregoing Agreement between you and Company does not require you to assign or offer to assign to Company any Invention that you develop entirely on your own time without using Company's equipment, supplies, facilities or trade secret information, except for those Inventions that either:

(a) Relate at the time of conception or reduction to practice to Company's business, or actual or demonstrably anticipated research or development; or

(b) Result from any work performed by you for Company.

To the extent a provision in the foregoing Agreement purports to require you to assign an Invention otherwise excluded from the preceding paragraph, the provision is against the public policy of this state and is unenforceable.

This limited exclusion does not apply to any patent or Invention covered by a contract between Company and the United States or any of its agencies requiring full title to such patent or Invention to be in the United States.

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EXECUTIVE EMPLOYMENT AGREEMENT

Employment Agreement ("Agreement") made as of the 6th day of January 2021 by and between Sangamo Therapeutics, Inc., a Delaware corporation (the "Company"), and Robert J. Schott ("Executive") (collectively, the "Parties").

R E C I T A L S

WHEREAS, the Company desires to employ Executive, and Executive desires to be employed by the Company, on the terms and conditions set forth in this Agreement.

NOW, THEREFORE, in consideration of the mutual promises set forth herein, the Parties agree follows:

1. Employment.

The Company hereby agrees to employ Executive and Executive hereby agrees to accept such employment, on the terms and conditions set forth in this Agreement, with a start date of 1st day of February, 2021 (the "Effective Date").

2. At-Will Employment.

Executive shall be employed on an at-will basis. Either Executive or the Company may terminate employment at any time, with or without cause, and with or without advance notice.

3. Position, Duties and Obligations.

(a) Executive shall be appointed as the Senior Vice President, Chief Development Officer and shall serve in such position, and in such other positions as the Board and the Company may from time to time reasonably determine, including but not limited to working with medical affairs and drug safety, product development and management, regulatory affairs, and development operations, subject at all times to the direction, supervision and authority of the Chief Executive Officer (collectively, your "Duties").

(b) During Executive's employment, Executive shall perform Executive's Duties faithfully and to the best of Executive's ability, and shall devote substantially all of
Executive's business time, attention, knowledge, skills and interests to the business of the Company (and its affiliates or subsidiaries).

(c) During Executive's employment, Executive shall not, whether directly or indirectly, render any services of a commercial or professional nature to any other person or organization, whether for compensation or otherwise, without the prior written consent of the Chief Executive Officer.

(d) The foregoing in this Section 3 shall not preclude Executive from serving on any corporate, civic or charitable boards or committees on which Executive is serving as of the Effective Date and discloses to the Chief Executive Officer prior to the Effective Date or on

which Executive commences service following such date with the Chief Executive Officer's prior written approval, so long as such activities do not interfere with the performance of Executive's responsibilities hereunder.

a. Executive's principal place of business will be located in Brisbane, California.

b. Executive represents that Executive may enter into this Agreement, and as of the Effective Date, 1) accept employment with the Company under the terms of this Agreement, and 2) perform the Duties and responsibilities contemplated by this Agreement without violating any other agreement or agreements with other parties including but not limited to and any prior employers.

1. Compensation and Benefits.

a. **Base Compensation**. The Company shall pay to Executive an annual base salary of $440,000 Dollars, prorated for any partial employment period and payable in equal monthly installments in accordance with the Company's payroll schedule. The Compensation Committee of the Board shall annually review the then-current level of Executive's base salary (for increase only) to determine the amount, if any, of change to such salary.

b. **Annual Performance Bonus**. Executive is eligible to earn an annual performance bonus commencing with the 2021 calendar year performance period. The target amount of Executive's annual cash bonus shall be 35% percent of Executive's annual base salary. The Board shall have sole discretion to determine whether any annual cash bonus will be paid based upon achievement of both corporate objectives and Executive's personal objectives, and the reasonable discretion to determine that actual amount of any such bonus. Executive must be an employee in good standing on the date that the Board makes such determination in order to earn any such bonus, which determination shall be made by the Board no later than March 31 of the calendar year first following the performance period calendar year. The actual bonus may be more or less than the target amount based upon the Company's achievement over the year. Any bonus to which Executive becomes entitled for a particular calendar year shall be paid in accordance with the terms of the applicable bonus plan, but in no event later than the second payroll period following such Board determination. The Compensation Committee of the Board shall annually review Executive's then target amount for the annual cash bonus (for increase only) to determine the amount, if any, of change to such target amount.

c. **Executive Severance Plan**. Executive shall be deemed an Eligible Employee and an Executive Officer and entitled to receive certain severance benefits under the Sangamo Therapeutics, Inc. Executive Severance Plan dated February 6, 2019 (the "Severance Plan") subject to the terms and conditions of the Severance Plan. A copy of the Severance Plan has been provided to Executive concurrently with this Agreement. Notwithstanding the foregoing, in the event that the Company withdraws this offer after it is signed by Executive or terminates this Agreement prior to the Effective Date for any reason other than Executive's

failure to successfully pass the requirements for a background check clearance, satisfactory reference check, and satisfactory proof of Executive’s legal right to work in the United States

required under Section 8(a) herein, then Executive shall be entitled to severance under the Severance Plan as though his employment was terminated by the Company other than for Cause to the same extent as he would otherwise be entitled had such termination occurred after the Effective Date; provided, however, that Executive shall not be entitled to such severance if he has not notified his current employer of his intent to resign his employment at the time the Company informs him of the withdrawal or termination of this Agreement.

a. **Benefits**. Executive will be entitled to the employee benefits generally provided to other executive officers of the Company pursuant to the terms of the applicable benefit plans. Executive will not be subject to a formal paid time off program. Executive is free to take paid time off from work for vacation, medical appointments, and other short-term absences due to illnesses or other personal reasons. If Executive desires to take time off for a duration longer than two (2) weeks manager approval is required. Unlimited paid time off is available from the first day of employment.

b. **Equity**. Effective on the second Friday of the month, or if not a trading day, the trading day prior (the "Grant Date") in which the Executive commences employment, as long as the first day of employment with Sangamo occurs between the prior Grant Date and the day preceding the Grant Date, the Compensation Committee of the Board shall grant you non- statutory stock options to purchase up to 80,000 shares of the Company's Common Stock subject to the terms and conditions of the Company's 2018 Equity Incentive Plan (the "Plan"),with an exercise price per share equal to the fair market value of the Company's Common Stock on the Grant Date (the "Option"). If the first day of employment is Grant Date, the equity incentive award will be received on the subsequent Grant Date. The Option will be evidenced by the standard stock option agreement under the Plan and will be subject to the terms and conditions of that agreement and the Plan:

- $1/4^{th}$ (one-fourth) of the Option shares will vest on the first-year anniversary of the Grant Date, and

- $1/48^{th}$ (one forty-eighth) of the Option shares will vest in equal monthly installments for thirty-six (36) months thereafter,

provided Executive remains a full-time employee through each such vesting date. Vesting of the Option and any subsequent equity grants will cease upon termination of Executive's service by either party for any reason.

i. Also, subject to approval by the Compensation Committee of the Board, we intend to grant you 40,000 restricted stock units ("Restricted Stock Units") under the Plan. Each Restricted Stock Unit represents the right to receive one share of the Company's common stock upon the specified issuance date following vesting. Your Restricted Stock Units will vest in a series of three (3) successive equal annual installments upon your completion of each year of service to the Company measured from the Vesting Commencement Date. The issuance of the underlying shares of common stock in settlement of vested Restricted Stock Units will be subject to the Company's collection of all applicable withholding taxes. The Restricted Stock Units will

be evidenced by the Plan's form of Restricted Stock Unit Issuance Agreement and will be subject to its terms and conditions and the Plan.

i. **Advance for Relocation Assistance.** Executive shall be advanced relocation assistance (the "Relocation Assistance") in the amount of seventy-five thousand dollars ($75,000), subject to required deductions and withholdings and payable in the first regularly rescheduled payroll after Executive relocates to the San Francisco Bay Area. Although the Relocation Assistance is advanced upon relocation, it is expressly conditioned on Executive not terminating employment prior to the first (1st) anniversary of payment under any circumstances other than a termination that would entitle Executive to receive benefits under the Severance Plan, and such advanced Relocation Assistance shall not be deemed earned by
Executive until such service condition has been met. If Executive's employment terminates at any time prior to the first (1st) anniversary of the Effective Date and Executive is not entitled to receive benefits under the Severance Plan (such termination, a "Disqualifying Termination"), then, Executive shall at the time of such Disqualifying Termination promptly repay the full Relocation Assistance to the Company. In the event Executive does not earn and fails to promptly repay the Relocation Assistance in connection with a Disqualifying Termination, then the Company shall be further entitled to recover from Executive its costs and expenses incurred in enforcing Executive's repayment obligation, including reasonable attorney's fees and costs. If the Company has implemented a formal relocation policy at the time of your relocation and it is more favorable to you, you will be eligible, at your option, for relocation per the policy instead of a lump sum Relocation Assistance

ii. **Clawback**. Notwithstanding anything to the contrary in this Agreement, all compensation paid to Executive by the Company (whether payable pursuant to this Agreement or otherwise) will be subject to reduction, recovery and/or recoupment to the extent required by any present or future law, government regulation or stock exchange listing requirement (or any policy adopted by the Company which ensures compliance with the requirements of any such law, government regulation or stock exchange listing requirement).

iii. **Resignation from Positions**. Notwithstanding any other provision of this Agreement to the contrary, upon any termination of employment (whether voluntary or involuntary), Executive, upon written request from the Board, shall immediately resign from any positions Executive has with the Company (or any subsidiary), whether as an executive, officer, employee, consultant, director, trustee, fiduciary or otherwise.

1. **Confidentiality**. Executive agrees to abide by the terms and conditions of the Employee Confidential Information and Invention Assignment Agreement between Executive and the Company, a copy of which is attached as Exhibit A. Executive further agrees that at all times both during Executive's employment by the Company and after Executive's employment ends, Executive will keep in confidence and trust, and will not use or disclose, except as directed by the Company, any confidential or proprietary information of the Company.

2. **Tax Withholdings**. Any and all cash compensation and other benefits (including without limitation, base salary, annual bonus and sign-on bonus) paid to Executive under this Agreement shall be subject to all applicable tax withholding requirements, and the Company

shall make such other deductions as may be required and/or allowed by applicable law and/or as authorized in writing by Executive.

1. **Arbitration**. Any dispute, controversy, or claim, whether contractual or non-contractual, between Executive and the Company shall be resolved by binding arbitration before the Judicial Arbitration and Mediation Service (the "JAMS"), in accordance with the JAMS Employment Arbitration Rules and Procedures, available at www.jamsadr.com. Executive and the Company each agree that before proceeding to arbitration, they will mediate disputes before the JAMS by a mediator approved by the JAMS. If mediation fails to resolve the matter, any subsequent arbitration shall be conducted by an arbitrator approved by the JAMS and mutually acceptable to Executive and the Company. All disputes, controversies, and claims shall be conducted by a single arbitrator, who shall: (i) allow discovery authorized by California Code of Civil Procedure Section 1282, et seq., or any other discovery required by applicable law; and (ii) issue a written award that sets forth the essential findings of fact and conclusions of law on which the award is based. The arbitrator shall have the authority to award any relief authorized by law in connection with the asserted claims or disputes. Judgment upon the arbitrator's award may be entered in any court having jurisdiction thereof. If Executive and the Company are unable to agree on the mediator or the arbitrator, then the JAMS shall select the mediator/arbitrator. The resolution of the dispute by the arbitrator shall be final, binding, non-appealable, and fully enforceable by a court of competent jurisdiction under the Federal Arbitration Act. The arbitration award shall be in writing and shall include a statement of the reasons for the award. The arbitration shall be held in San Francisco, California. The Company shall pay all JAMS, mediation, and arbitrator's fees and costs, irrespective of who raised the claim and the outcome of arbitration.

2. Miscellaneous.

i. **Conditions to Agreement**. This Agreement is contingent upon a background check clearance, satisfactory reference check, and satisfactory proof of Executive's legal right to work in the United States. Executive agrees to provide any documentation or information at the Company's request to facilitate these processes.

ii. **Governing Law**. This Agreement shall be interpreted, construed, governed and enforced according to the laws of the State of California.

iii. **Attorneys' Fees**. In the event of any controversy, claim or dispute between the parties, arising out of or relating to this Agreement or the breach hereof, or the interpretation hereof, each party shall bear its own legal fees and expenses. Notwithstanding the foregoing, in the event of a finding by any court having jurisdiction over such matter that any party initiating an action under this Agreement failed to have a reasonable prospect of prevailing on its claim, the arbitrator shall have discretion to award the prevailing party attorneys' fees and costs incurred by it with respect to such claim or action. The "prevailing party" means the party determined by the arbitrator to have most nearly prevailed, even if such party did not prevail in all matters, not necessarily the one in whose favor a judgment is rendered.

i. **Amendments**. No amendment or modification of the terms or conditions of this Agreement shall be valid unless in writing and signed by the Parties hereto.

ii. **Severability**. If any provision of this Agreement as applied to any party or to any circumstance should be adjudged by a court of competent jurisdiction (or determined by the arbitrator) to be void or unenforceable for any reason, the invalidity of that provision shall in no way affect (to the maximum extent permissible by law) the application of such provision under circumstances different from those adjudicated by the court or determined by the arbitrator, the application of any other provision of this Agreement, or the enforceability or invalidity of this Agreement as a whole. Should any provision of this Agreement become or be deemed invalid, illegal or unenforceable in any jurisdiction by reason of the scope, extent or duration of its coverage, then such provision shall be deemed amended to the extent necessary to conform to applicable law so as to be valid and enforceable or, if such provision cannot be so amended without materially altering the intention of the parties, then such provision will be stricken, and the remainder of this Agreement shall continue in full force and effect.

iii. **Successors and Assigns**. The rights and obligations of the Company under this Agreement shall inure to the benefit of and shall be binding upon the successors and assigns of the Company. Executive shall not be entitled to assign any of Executive's rights or obligations under this Agreement.

iv. **Entire Agreement**. This Agreement, along with any other agreements set forth herein, including without limitation, the Proprietary Information and Inventions Agreement, constitutes the entire agreement between the parties with respect to the employment of Executive.

SANGAMO THERAPEUTICS, INC.

By: /s/ Whitney B. Jones
Name: Whitney B. Jones

Title: Senior Vice President, Chief People Officer

ROBERT J. SCHOTT
/s/ Robert J. Schott

EXHIBIT A

EMPLOYEE CONFIDENTIAL INFORMATION AND INVENTION ASSIGNMENT AGREEMENT

In consideration of my employment or continued employment by Sangamo Therapeutics, Inc. ("Sangamo"), its direct and indirect subsidiaries, parents, affiliates, predecessors, successors and assigns (together with Sangamo, the "**Company**"), and the compensation and benefits provided to me now and during my employment with the Company, I hereby enter into this Employee Confidential Information and Invention Assignment Agreement (the "**Agreement**"), which will be deemed effective as of the first day of my employment with the Company:

1. CONFIDENTIAL INFORMATION PROTECTIONS.

a. **Recognition of Company's Rights; Nondisclosure.** I understand and acknowledge that my employment by Company creates a relationship of confidence and trust with respect to Company's Confidential Information (as defined below) and that Company has a protectable interest therein. At all times during and after my employment, I will hold in confidence and will not disclose, use, lecture upon, or publish any of Company's Confidential Information, except as such disclosure, use or publication may be required in connection with my work for Company, or unless an officer of Company expressly authorizes such disclosure. I will obtain Company's written approval before publishing or submitting for publication any material (written, oral, or otherwise) that discloses and/or incorporates any Confidential Information. I hereby assign to Sangamo any rights I may have or acquire in such Confidential Information and recognize that all Confidential Information shall be the sole and exclusive property of Sangamo and its assigns. I will take all reasonable precautions to prevent the inadvertent accidental disclosure of Confidential Information. Notwithstanding the foregoing, pursuant to 18 U.S.C. Section 1833(b), I shall not be held criminally or civilly liable under any federal or state trade secret law for the disclosure of a trade secret that: (1) is made in confidence to a federal, state, or local government official, either directly or indirectly, or to an attorney, and solely for the purpose of reporting or investigating a suspected violation of law; or (2) is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal.

b. **Confidential Information.** The term **"Confidential Information"** shall mean any and all confidential knowledge, data or information of Company. By way of illustration but not limitation, **"Confidential Information"** includes (a) trade secrets, inventions, mask works, ideas, processes, formulas, software in source or object code versions, data, programs, other works of authorship, know-how, improvements, discoveries, developments, designs and techniques and any other proprietary technology and all Intellectual Property Rights therein (collectively, **"Inventions"**); (b) information regarding research, development, new products, marketing and selling, business plans, budgets and unpublished financial statements, licenses, prices and costs, margins, discounts, credit terms, pricing and billing policies, quoting procedures, methods of obtaining business, forecasts, future plans and potential strategies, financial projections and business strategies, operational plans, financing and capital-raising plans, activities and agreements, internal services and operational manuals, methods of conducting Company business, suppliers and supplier information, and purchasing; (c) information regarding customers and potential customers of Company, including customer lists, names, representatives, their needs or desires with respect to the types of products or services offered by Company, proposals, bids, contracts and their contents and parties, the type and quantity of products and services provided or sought to be provided to customers and potential customers of Company and other non-public information relating to customers and potential customers; (d) information regarding any of Company's business partners and their services, including names, representatives, proposals, bids, contracts and their contents and parties, the type and quantity of products and services received by Company, and other non-public information relating to business partners; (e) information regarding personnel, employee lists, compensation, and employee skills; and (f) any other non-public information which a competitor of Company could use to the competitive disadvantage of Company. Notwithstanding the foregoing, it is understood that, at all such times, I am free to use information which is generally known in the trade or industry through no breach of this Agreement or other act or omission by me. Further, notwithstanding the foregoing or anything to the contrary in this Agreement or any other agreement between the Company and me, nothing in this Agreement shall limit my right to discuss my employment or report possible violations of law or

regulation with any federal government agency or similar state or local agency or to discuss the terms and conditions of my employment with others to the extent expressly permitted by Section 7 of the National Labor Relations

Act.

a. **Third Party Information.** I understand, in addition, that Company has received, and in the future will receive, from third parties their confidential and/or proprietary knowledge, data or information (**"Third Party Information"**) subject to a duty on Company's part to maintain the confidentiality of such information and to use it only for certain limited purposes. During my employment and thereafter, I will hold Third Party Information in confidence and will not disclose to anyone (other than Company personnel who need to know such information in connection with their work for Company) or use, except in connection with my work for Company, Third Party Information unless expressly authorized by an officer of Company in writing.

b. **No Improper Use of Information of Prior Employers and Others.** During my employment by Company, I will not improperly use or disclose confidential information or trade secrets, if any, of any former employer or any other person to whom I have an obligation of confidentiality, and I will not bring onto the premises of Company any unpublished documents or any property belonging to any former employer or any other person to whom I have an obligation of confidentiality unless consented to in writing by that former employer or person.

1. ASSIGNMENTS OF INVENTIONS.

a. **Definitions.** As used in this Agreement, the term **"Intellectual Property Rights"** means all trade secrets, Copyrights, trademarks, mask work rights, patents and other intellectual property rights recognized by the laws of any jurisdiction or country; the term **"Copyright"** means the exclusive legal right to reproduce, perform, display, distribute and make derivative works of a work of authorship (as a literary, musical, or artistic work) recognized by the laws of any jurisdiction or country; and the term **"Moral Rights"** means all paternity, integrity, disclosure, withdrawal, special and any other similar rights recognized by the laws of any jurisdiction or country.

b. **Excluded Inventions and Other Inventions.** Attached hereto as **Attachment 1** is a list describing all existing Inventions, if any, that may relate to Company's business or actual or demonstrably anticipated research or development and that were made by me or acquired by me prior to the commencement of my employment with, and which are not to be assigned to, Company (**"Excluded Inventions"**). If no such list is attached, I represent and agree that it is because I have no rights in any existing Inventions that may relate to Company's business or actual or demonstrably anticipated research or development. For purposes of this Agreement, **"Other Inventions"** means

Inventions in which I have or may have an interest, as of the commencement of my employment, other than Company Inventions (defined below) and Excluded Inventions. I acknowledge and agree that if I use any Excluded Inventions or any Other Inventions in the scope of my employment, or if I include any Excluded Inventions or Other Inventions in any product or service of Company, or if my rights in any Excluded Inventions or Other Inventions may block or interfere with, or may otherwise be required for, the exercise by Company of any rights assigned to Company under this Agreement, I will immediately so notify Company in writing. Unless Company and I agree otherwise in writing as to particular Excluded Inventions or Other Inventions, I hereby grant to Company, in such circumstances (whether or not I give Company notice as required above), a non-exclusive, perpetual, transferable, fully-paid and royalty-free, irrevocable and worldwide license, with rights to sublicense through multiple levels of sublicensees, to reproduce, make derivative works of, distribute, publicly perform, and publicly display in any form or medium, whether now known or later developed, make, have made, use, sell, import, offer for sale, and exercise any and all present or future rights in, such Excluded Inventions and Other Inventions. To the extent that any third parties have rights in any such Excluded Inventions or Other Inventions, I hereby represent and warrant that such third party or parties have validly and irrevocably granted to me the right to grant the license stated above.

c. **Assignment of Company Inventions.** Inventions assigned to Sangamo, or to a third party as directed by Sangamo pursuant to Section 2.6, are referred to in this Agreement as **"Company Inventions."** Subject to Section 2.4 (Unassigned or Nonassignable Inventions) and except for Excluded Inventions set forth in **Attachment 1** and Other Inventions, I hereby assign to Sangamo all my right, title, and interest in and to any and all Inventions (and all Intellectual Property Rights with respect thereto) made, conceived, reduced to practice, or learned by me, either alone or with others, during the period of my employment by Company. To the extent required by applicable Copyright laws, I agree to assign in the future (when any copyrightable Inventions are first

fixed in a tangible medium of expression) my Copyright rights in and to such Inventions. Any assignment of Company Inventions (and all Intellectual Property Rights with respect thereto) hereunder includes an assignment of all Moral Rights. To the extent such Moral Rights cannot be assigned to Sangamo and to the extent the following is allowed by the laws in any country where Moral Rights exist, I hereby unconditionally and irrevocably waive the enforcement of such Moral Rights, and all claims and causes of action of any kind against Company or related to

Company's customers, with respect to such rights. I further acknowledge and agree that neither my successors- in-interest nor legal heirs retain any Moral Rights in any Company Inventions (and any Intellectual Property Rights with respect thereto).

a. **Unassigned or Nonassignable Inventions.** I recognize that this Agreement will not be deemed to require assignment of any Invention that is covered under California Labor Code section 2870(a) (the "**Specific Inventions Law**"), as detailed on **Attachment 2**.

b. **Obligation to Keep Company Informed.** During the period of my employment and for one (1) year after termination of my employment, I will promptly and fully disclose to Company in writing all Inventions authored, conceived, or reduced to practice by me, either alone or jointly with others. In addition, I will promptly disclose to Company all patent applications filed by me or on my behalf within one (1) year after termination of employment. At the time of each such disclosure, I will advise Company in writing of any Inventions that I believe fully qualify for protection under the provisions of the Specific Inventions Law; and I will at that time provide to Company in writing all evidence necessary to substantiate that belief. Company will keep in confidence and will not use for any purpose or disclose to third parties without my consent any confidential information disclosed in writing to Company pursuant to this Agreement relating to Inventions that qualify fully for protection under the Specific Inventions Law. I will preserve the confidentiality of any Invention that does not fully qualify for protection under the Specific Inventions Law.

c. **Government or Third Party.** I agree that, as directed by Company, I will assign to a third party, including without limitation the United States, all my right, title, and interest in and to any particular Company Invention.

d. **Ownership of Work Product.** I agree that Sangamo will exclusively own all work product that is made by me (solely or jointly with others) within the scope of my employment, and I hereby irrevocably and unconditionally assign to Sangamo all right, title, and interest worldwide in and to such work product. I acknowledge that all original works of authorship which are made by me (solely or jointly with others) within the scope of my employment and which are protectable by Copyright are "works made for hire," pursuant to United States Copyright Act (17 U.S.C., Section 101). I understand and agree that I have no right to publish on, submit for publishing, or use for any publication any work product protected by this Section, except as necessary to perform services for Company.

e. **Enforcement of Intellectual Property Rights and Assistance.** I will assist Company in every proper way to obtain, and from time to time enforce, United States and foreign Intellectual Property Rights and Moral Rights relating to Company Inventions in any and all countries. To that end I will execute, verify and deliver such documents and perform such other acts (including appearances as a witness) as Company may reasonably request for use in applying for, obtaining, perfecting, evidencing, sustaining and enforcing such Intellectual Property Rights and the assignment thereof. In addition, I will execute, verify and deliver assignments of such Intellectual Property Rights to Sangamo or its designee, including the United States or any third party designated by Sangamo. My obligation to assist Company with respect to Intellectual Property Rights relating to such Company Inventions in any and all countries will continue beyond the termination of my employment, but Company will compensate me at a reasonable rate after my termination for the time actually spent by me at Company's request on such assistance. In the event Company is unable for any reason, after reasonable effort, to secure my signature on any document needed in connection with the actions specified in this paragraph, I hereby irrevocably designate and appoint Company and its duly authorized officers and agents as my agent and attorney in fact, which appointment is coupled with an interest, to act for and in my behalf to execute, verify and file any such documents and to do all other lawfully permitted acts to further the purposes of this Agreement with the same legal force and effect as if executed by me. I hereby waive and quitclaim to Company any and all claims, of any nature whatsoever, which I now or may hereafter have for infringement of any Intellectual Property Rights assigned under this Agreement to Sangamo.

f. **Incorporation of Software Code.** I agree that I will not incorporate into any Company software or otherwise deliver to Company any software code licensed under the GNU General Public License or Lesser General Public License or any other license that, by its terms, requires or conditions the use or distribution of such code on the disclosure, licensing, or distribution of any source code owned or licensed by Company **except** in strict compliance with Company's policies regarding the use of such software.

1. **RECORDS.** I agree to keep and maintain adequate and current records (in the form of notes, sketches, drawings and in any other form that is required by Company) of all Confidential Information developed by me and all Company Inventions made by me during the period of my employment at Company, which records will be available to and remain the sole property of Company at all times.

1. Duty of Loyalty During Employment. I agree that during the period of my employment by Company I will not, without Company's express written consent, directly or indirectly (a) engage in any other employment or (b) engage in any other activities that are competitive with, or would otherwise conflict with, my employment by Company.

2. No Solicitation of Employees, Consultants, or Contractors. I agree that during the period of my employment and for the one (1) year period after the date my employment ends for any reason, including but not limited to voluntary termination by me or involuntary termination by Company, I will not, as an officer, director, employee, consultant, owner, partner, or in any other capacity, either directly or through others, except on behalf of Company, solicit, induce, encourage, or participate in soliciting, inducing or encouraging any employee, consultant, or independent contractor of Company to terminate his, her or its relationship with Company, even if I did not initiate the discussion or seek out the contact.

3. Reasonableness of Restrictions. I agree that I have read this entire Agreement and understand it. I agree that this Agreement does not prevent me from earning a living or pursuing my career. I agree that the restrictions contained in this Agreement are reasonable, proper, and necessitated by Company's legitimate business interests. I represent and agree that I am entering into this Agreement freely and with knowledge of its contents with the intent to be bound by the Agreement and the restrictions contained in it.

4. No Conflicting Agreement or Obligation. I represent that my employment by Company does not and will not breach any agreement with any former employer or third party, including any noncompete agreement or any agreement to keep in confidence or refrain from using information acquired by me prior to my employment by Company. I further represent that I have not entered into, and will not enter into, any agreement, either written or oral, in conflict with my obligations under this Agreement.

5. Return Of Company Property. Subject to the nondisclosure requirements of Section 1.1 above, upon termination of my employment or upon Company's request at any other time, I will deliver to Company any and all of Company's property and equipment and any and all drawings, notes, memoranda, specifications, devices, formulas and documents, together with all copies thereof, and any other material containing or disclosing any Company Inventions, Third Party Information or Confidential Information of Company. I agree that I will not copy, delete, or alter any information contained upon my Company computer or Company equipment before I return it to Company. In addition, if I have used any personal computer, server, or e-mail system to receive, store, review, prepare or transmit any Company information, including but not limited to, Confidential Information, I agree to provide Company with a computer-useable copy of all such Confidential Information and then permanently delete and expunge such Confidential Information from those systems; and I agree to provide Company access to my system as reasonably requested to verify that the necessary copying and/or deletion is completed. I further agree that any property situated on Company's premises and owned by Company, including disks and other storage media, filing cabinets or other work areas, is subject to inspection by Company's personnel at any time with or without notice.

6. Legal and Equitable Remedies.

a. I agree that it may be impossible to assess the damages caused by my violation of this Agreement or any of its terms. I agree that any threatened or actual violation of this Agreement or any of its terms will constitute immediate and irreparable injury to Company, and Company will have the right to enforce this Agreement and any of its provisions by injunction, specific performance or other equitable relief, without bond and without prejudice to any other rights and remedies that Company may have for a breach or threatened breach of this Agreement.

b. In the event Company enforces this Agreement through a court or arbitration order, I agree that the restrictions of Sections 5 will remain in effect for a period of twelve (12) months from the effective date of the order enforcing the Agreement.

7. Notices. Any notices required or permitted under this Agreement will be given to Company at its headquarters location at the time notice is given, and to me at my address as listed on Company payroll, or at such other address as Company or I may designate by written notice to the other. Notice will be effective upon receipt or refusal of delivery. If delivered by certified or registered mail, notice will be considered to have been given five (5) business days after it was mailed, as evidenced by the postmark. If delivered by courier or express mail service, notice will be considered to have been given on the delivery date reflected by the courier or express mail service receipt.

8. NOTIFICATION OF NEW EMPLOYER. If I leave the employ of Company, I consent to the notification of my new employer of my rights and obligations under this Agreement, by Company providing a copy of this Agreement or otherwise.

9. GENERAL PROVISIONS.

a. **Governing Law.** This Agreement will be

governed by and construed according to the laws of the State of California as such laws are applied to agreements entered into and to be performed entirely within California between California residents.

a. **Severability.** In case any one or more of the provisions, subsections, or sentences contained in this Agreement will, for any reason, be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability will not affect the other provisions of this Agreement, and this Agreement will be construed as if such invalid, illegal or unenforceable provision had never been contained in this Agreement. If moreover, any one or more of the provisions contained in this Agreement will for any reason be held to be excessively broad as to duration, geographical scope, activity or subject, it will be construed by limiting and reducing it, so as to be enforceable to the extent compatible with the applicable law as it will then appear.

b. **Successors and Assigns.** This Agreement is for my benefit and the benefit of Company, its successors, assigns, parent corporations, direct and indirect subsidiaries, affiliates, and purchasers, and will be binding upon my heirs, executors, administrators and other legal representatives.

c. **Survival.** This Agreement shall survive the termination of my employment, regardless of the reason, and the assignment of this Agreement by Company to any successor in interest or other assignee.

d. **Employment At-Will.** I agree and understand that nothing in this Agreement will change my at-will employment status or confer any right with respect to continuation of employment by Company, nor will it interfere in any way with my right or Company's right to terminate my employment at any time, with or without cause or advance notice.

e. **Waiver.** No waiver by Company of any breach of this Agreement will be a waiver of any preceding or succeeding breach. No waiver by Company of any right under this Agreement will be construed as a waiver of any other right. Company will not be required to give notice to enforce strict adherence to all terms of this Agreement.

f. **Export.** I agree not to export, reexport, or transfer, directly or indirectly, any U.S. technical data acquired from Company or any products utilizing such data, in violation of the United States export laws or regulations.

g. **Entire Agreement.** This Agreement is the final, complete and exclusive agreement of the parties with respect to the subject matter of this Agreement and supersedes and merges all prior discussions between the parties; provided, however, prior to the execution of this Agreement, if Company and I were parties to any agreement regarding the subject matter hereof, that agreement will be superseded by this Agreement prospectively only. No modification of or amendment to this Agreement, or any waiver of any rights under this Agreement, will be effective unless in writing and signed by me and an authorized officer of the Company. Any subsequent change or changes in my Duties (as used in my Executive Employment Agreement), salary or compensation will not affect the validity or scope of this Agreement. If no other agreement governs nondisclosure and assignment of inventions during any period in which I was previously engaged or am in the future engaged by Company as an independent contractor, the obligations pursuant to sections of this Agreement titled “Confidential Information Protections” and “Assignment of Inventions” shall apply.

ROBERT J. SCHOTT:

I HAVE READ, UNDERSTAND, AND ACCEPT THIS AGREEMENT.

/s/ Robert J. Schott
(Signature)

By: Robert J. Schott

Title: Senior Vice President, Chief Development Officer Date: Jan 14, 2021

SANGAMO THERAPEUTICS, INC.: ACCEPTED AND AGREED:

/s/ Whitney B. Jones
(Signature)

By: Whitney B. Jones

Title: Senior Vice President, Chief People Officer Date: Jan 14, 2021

ATTACHMENT 1 PRIOR INVENTIONS

TO: Sangamo Therapeutics, Inc. FROM: Robert J. Schott

DATE: Jan 14, 2021

SUBJECT: Prior Inventions

1. Except as listed in Section 2 below, the following is a complete list of all inventions or improvements relevant to the subject matter of my employment by Sangamo Therapeutics, Inc. ("**Company**") that have been made or conceived or first reduced to practice by me alone or jointly with others prior to my engagement by Company:

☐ No inventions or improvements.

☐ See below:

☐ Additional sheets attached.

2. Due to a prior confidentiality agreement, I cannot complete the disclosure under Section 1 above with respect to inventions or improvements generally listed below, the intellectual property rights and duty of confidentiality with respect to which I owe to the following party(ies):

	Invention or Improvement	**Party(ies)**	**Relationship**
1.☐			
2.☐			
3.☐			

☐ Additional sheets attached.

ATTACHMENT 2

LIMITED EXCLUSION NOTIFICATION

This is to notify you in accordance with Section 2872 of the California Labor Code that the foregoing Agreement between you and Company does not require you to assign or offer to assign to Company any Invention that you develop entirely on your own time without using Company's equipment, supplies, facilities or trade secret information, except for those Inventions that either:

a. Relate at the time of conception or reduction to practice to Company's business, or actual or demonstrably anticipated research or development; or

b. Result from any work performed by you for Company.

To the extent a provision in the foregoing Agreement purports to require you to assign an Invention otherwise excluded from the preceding paragraph, the provision is against the public policy of this state and is unenforceable.

This limited exclusion does not apply to any patent or Invention covered by a contract between Company and the United States or any of its agencies requiring full title to such patent or Invention to be in the United States.

Exhibit 31.1

CERTIFICATION

I, Alexander D. Macrae, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Sangamo Therapeutics, Inc.;

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

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

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

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

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

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

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

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

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

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

Date: May 4, 2021

/s/ ALEXANDER D. MACRAE

Alexander D. Macrae
President and Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION

I, Prathyusha Duraibabu, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Sangamo Therapeutics, Inc.;

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

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

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

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

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

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

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

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

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

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

Date: May 4, 2021

/s/ PRATHYUSHA DURAIBABU

Prathyusha Duraibabu
Vice President, Finance
(Principal Financial and Accounting Officer)

Exhibit 32.1

Certifications Pursuant to 18 U.S.C. §1350, as Adopted
Pursuant to §906 of the Sarbanes-Oxley Act of 2002

Pursuant to the requirement set forth in Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended, (the "Exchange Act") and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. §1350), each of the undersigned hereby certifies in his or her capacity as an officer of Sangamo Therapeutics, Inc. (the "Company"), that, to the best of his or her knowledge:

(1) the Company's Quarterly Report on Form 10-Q for the period ended March 31, 2021, to which this Certification is attached as Exhibit 32.1 (the "Report") fully complies with the requirements of Section 13(a) or Section 15(d) of the Exchange Act; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ ALEXANDER D. MACRAE

Alexander D. Macrae
President and Chief Executive Officer
(Principal Executive Officer)

Date: May 4, 2021

/s/ PRATHYUSHA DURAIBABU

Prathyusha Duraibabu
Vice President, Finance
(Principal Financial and Accounting Officer)

Date: May 4, 2021

This certification accompanies the Quarterly Report on 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 Sangamo Therapeutics, Inc. under the Securities Act of 1933, as amended, or the Exchange Act (whether made before or after the date of the Form 10-Q), irrespective of any general incorporation language contained in such filing. A signed original of this written statement required by Section 906 of the Sarbanes-Oxley Act of 2002 has been provided to Sangamo Therapeutics, Inc. and will be retained by Sangamo Therapeutics, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.