UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

(Mark One)

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

For the quarterly period ended September 30, 2024

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.)**

501 Canal Blvd., Richmond, California, 94804
(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 November 7, 2024, 208,646,870 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. Solely for convenience, trademarks and trade names referred to in this Quarterly Report may appear without the ® or ™ symbols, but such references are not intended to indicate in any way that the Company will not assert, to the fullest extent under applicable law, its rights or the rights of the applicable licensor to these trademarks and trade names. The Company does not intend its use or display of other entities' trade names, trademarks or service marks to imply a relationship with, or endorsement or sponsorship of the Company by, any other entity.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

Some statements contained in this report are "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. These forward-looking statements 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. Forward-looking statements may include, but are not limited to, statements about:

- our estimates regarding the sufficiency of our cash resources and our expenses, capital requirements and need for substantial additional financing, and our ability to obtain additional financing, including the impact of business development and clinical advancements on our cash runway;
- our ability to continue to operate as a going concern, including our estimate that our available cash and cash equivalents as of September 30, 2024 will not be sufficient to fund our planned operations for one year from the issuance date of the Condensed Consolidated Financial Statements included in Part I, Item 1, "Financial Statements and Supplementary Data" of this Quarterly Report on Form 10-Q;
- our projected operating and financial performance;
- our plans for advancing our development programs and the plans of our collaboration partners for advancing our partnered programs, and the expected charges and cost savings associated with our restructurings and facility closures;
- anticipated research and development of product candidates and potential commercialization of any resulting approved products;
- the initiation, scope, rate of progress, enrollment, dosing, anticipated results and timing of our preclinical studies and clinical trials and those of our collaborators or 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 gene editing technologies, zinc finger, or ZF, technology platform, and zinc finger transcriptional regulators, or ZF-transcriptional regulators, which include zinc finger repressors, or ZFRs;
- our ability to realize the expected benefits of the global epigenetic regulation and capsid delivery license agreement with Genentech, a member of the Roche group, the potential for Genentech to complete clinical development, regulatory interactions, manufacturing and global commercialization of any resulting products, and the potential for us to receive milestone payments and royalties from Genentech;
- anticipated investigational new drug, or IND, and clinical trial application, or CTA, submissions and potential acceptance thereof by the U.S. Food and Drug Administration, or FDA and regulatory authorities outside the United States;
- the potential for isaralgagene civaparvovec to qualify for the FDA's Accelerated Approval program, including the adequacy of data generated in the Phase 1/2 STAAR study to support any such approval; expectations concerning the availability of additional data to support a potential Biologics License Application, or BLA, submission for isaralgagene civaparvovec and the timing of such submission;
- our ability to establish and maintain collaborations and strategic partnerships and realize the expected benefits of such arrangements, including our ability to find a collaboration partner for our Fabry disease program and to engage in additional transactions with respect to our STAC-BBB capsid delivery program and epigenetic regulation capabilities, and Pfizer's continued advancements of the giroctocogene fitelparvovec program, including the potential for Pfizer to complete clinical development, regulatory interactions, manufacturing and global commercialization of any resulting products;
- anticipated revenues from existing and new collaborations and the timing thereof;
- our and our collaborators' anticipated plans and timelines in conducting our ongoing and potential future clinical trials and presenting clinical data from such clinical trials, and the anticipated advancement of our product candidates to late-stage development;

- our estimates regarding the impact of the macroeconomic environment on our business and operations and the business and operations of our collaborators, including preclinical studies, 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;
- our ability, and the ability of 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 and maintain rights to the 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 such competition;
- 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” 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, performance or achievements expressed or implied by the forward-looking statements. These risks and uncertainties include, without limitation:

- There is substantial doubt about our ability to continue to operate as a going concern. We need substantial additional funding to execute our operating plan and to continue to operate as a going concern. If adequate funds are not available to us on a timely basis, or at all, we will be required to take additional actions to address our liquidity needs, including additional cost reduction measures such as further reducing operating expenses and delaying, reducing the scope of, discontinuing or altering our research and development activities, which would have a material adverse effect on our business and prospects, or we may be required to cease operations entirely, liquidate all or a portion of our assets, and/or seek protection under the U.S. Bankruptcy Code, and you may lose all or part of your investment. Future sales and issuances of equity securities would also result in substantial dilution to our stockholders.
- We are a biotechnology company with no approved products or product revenues. Our success depends substantially on results of preclinical studies and clinical trials demonstrating safety and efficacy of our product candidates to the satisfaction of applicable regulatory authorities. Obtaining positive clinical trial results and regulatory approvals is expensive, lengthy, challenging and unpredictable and may never occur for any product candidates.
- We are early in our research and development efforts for our core preclinical neurology programs that are the current focus of our business. We may encounter difficulties in advancing product candidates from research programs to preclinical and clinical development.
- Success in research and preclinical studies or early clinical trial results may not be indicative of results obtained in later trials. Likewise, preliminary, initial or interim data from clinical trials may be materially different from final data.
- Many of our product candidates are based on novel ZF technologies that have yet to yield any approved commercially viable therapeutic products.
- We have historically incurred significant operating losses since inception and anticipate continued losses for the foreseeable future. We may never become profitable.
- 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 are currently substantially reliant on third-party manufacturers. 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.
- Third parties, who may or may not be competitors, may allege that we are infringing, misappropriating, or otherwise practicing in an unauthorized manner their patents or other proprietary rights. Such allegations may result in infringement actions, other misappropriation actions or threats of such actions, all of which could increase the risks of costly, lengthy and distracting litigation with unpredictable results.
- Our recent restructurings may not result in anticipated savings or operational efficiencies and could result in total costs and expenses that are greater than expected.
- 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 the uncertainty regarding our ability to obtain sufficient additional funding and to continue to operate as a going concern as well as the competition among numerous biopharmaceutical companies and academic institutions for individuals with these skills.
- Unfavorable global economic conditions could have a negative impact on our operations, which could materially and adversely affect our ability to continue to operate as a going concern and otherwise have a material adverse effect on our business, financial condition, results of operations, prospects and market price of our common stock.
- 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.
- We have fully impaired our goodwill and indefinite-lived intangible assets, have recorded significant impairment of our right-of-use and other long-lived assets, and may be required to record significant additional charges if our long-lived assets become further impaired in the future.

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, 2023 as filed with the Securities and Exchange Commission on March 13, 2024, as supplemented by the risks described under “Risk Factors” in Part II, Item 1A of this Quarterly Report on Form 10-Q, 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 if 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)

	September 30, 2024	December 31, 2023
ASSETS		
Current assets:		
Cash and cash equivalents	$ 39,201	$ 45,204
Marketable securities	—	35,798
Accounts receivable	10,496	923
Prepaid expenses and other current assets	8,434	12,403
Total current assets	58,131	94,328
Property and equipment, net	19,146	26,874
Operating lease right-of-use assets	17,766	25,991
Refundable research income tax credits and other non-current assets	14,720	16,627
Restricted cash	1,500	1,500
Total assets	$ 111,263	$ 165,320
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 19,791	$ 15,259
Accrued compensation and employee benefits	10,961	8,918
Other accrued liabilities	11,635	23,554
Deferred revenues	774	—
Total current liabilities	43,161	47,731
Long-term portion of lease liabilities	27,727	33,515
Other non-current liabilities	1,241	1,187
Total liabilities	72,129	82,433
Commitments and contingencies		
Stockholders' equity:		
Preferred stock	—	—
Common stock	2,086	1,781
Additional paid-in capital	1,522,192	1,492,077
Accumulated deficit	(1,480,921)	(1,406,376)
Accumulated other comprehensive loss	(4,223)	(4,595)
Total stockholders' equity	39,134	82,887
Total liabilities and stockholders' equity	$ 111,263	$ 165,320

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 September 30,		Nine Months Ended September 30,	
	2024	2023	2024	2023
Revenues	$ 49,412	$ 9,398	$ 50,249	$ 174,190
Operating expenses:				
Research and development	27,732	57,089	87,846	183,351
General and administrative	11,049	13,918	34,861	48,068
Impairment of long-lived assets	—	44,799	5,521	65,232
Impairment of goodwill and indefinite-lived intangible assets	—	—	—	89,485
Total operating expenses	38,781	115,806	128,228	386,136
Income (loss) from operations	10,631	(106,408)	(77,979)	(211,946)
Interest and other income, net	129	3,515	3,694	9,610
Income (loss) before income taxes	10,760	(102,893)	(74,285)	(202,336)
Income tax expense (benefit)	88	1,270	260	(4,800)
Net income (loss)	10,672	(104,163)	(74,545)	(197,536)
Net income allocated to participating securities	1,287	—	—	—
Net income (loss) available to common stockholders	$ 9,385	$ (104,163)	$ (74,545)	$ (197,536)
Net income (loss) per share				
Basic	$ 0.05	$ (0.59)	$ (0.37)	$ (1.14)
Diluted	$ 0.04	$ (0.59)	$ (0.37)	$ (1.14)
Shares used in computing net income (loss) per share				
Basic	208,345	177,171	198,849	173,375
Diluted	214,325	177,171	198,849	173,375

See accompanying Notes to Condensed Consolidated Financial Statements.

SANGAMO THERAPEUTICS, INC.

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2024	2023	2024	2023
Net income (loss)	$ 10,672	$ (104,163)	$ (74,545)	$ (197,536)
Foreign currency translation adjustment	1,664	(1,144)	371	981
Net pension (loss) gain	(4)	5	234	2
Unrealized gain (loss) on marketable securities, net of tax	—	494	(233)	840
Comprehensive income (loss)	$ 12,332	$ (104,808)	$ (74,173)	$ (195,713)

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 September 30, 2024					
	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Total Stockholders' Equity
	Shares	Amount				
Balances at June 30, 2024	208,201,140	$ 2,082	$ 1,519,084	$ (1,491,593)	$ (5,883)	$ 23,690
Issuance of common stock upon exercise of stock options and vesting of restricted stock units, net of tax	418,572	4	(207)	—	—	(203)
Stock-based compensation	—	—	3,315	—	—	3,315
Foreign currency translation adjustment	—	—	—	—	1,664	1,664
Net pension loss	—	—	—	—	(4)	(4)
Net income	—	—	—	10,672	—	10,672
Balances at September 30, 2024	208,619,712	$ 2,086	$ 1,522,192	$ (1,480,921)	$ (4,223)	$ 39,134

	Nine Months Ended September 30, 2024					
	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Total Stockholders' Equity
	Shares	Amount				
Balances at December 31, 2023	178,133,548	$ 1,781	$ 1,492,077	$ (1,406,376)	$ (4,595)	$ 82,887
Issuance of common stock, net of offering expenses	24,761,905	248	21,540	—	—	21,788
Issuance of common stock upon exercise of pre-funded warrants	3,809,523	38	33	—	—	71
Issuance of common stock upon exercise of stock options and vesting of restricted stock units, net of tax	1,535,250	15	(699)	—	—	(684)
Issuance of common stock under employee stock purchase plan	379,486	4	142	—	—	146
Stock-based compensation	—	—	9,099	—	—	9,099
Foreign currency translation adjustment	—	—	—	—	371	371
Net pension gain	—	—	—	—	234	234
Net unrealized loss on marketable securities, net of tax	—	—	—	—	(233)	(233)
Net loss	—	—	—	(74,545)	—	(74,545)
Balances at September 30, 2024	208,619,712	$ 2,086	$ 1,522,192	$ (1,480,921)	$ (4,223)	$ 39,134

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 September 30, 2023					
	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Total Stockholders' Equity
	Shares	Amount				
Balances at June 30, 2023	177,074,546	$ 1,771	$ 1,479,725	$ (1,241,918)	$ (5,936)	$ 233,642
Issuance of common stock upon exercise of stock options and vesting of restricted stock units, net of tax	205,129	2	(103)	—	—	(101)
Stock-based compensation	—	—	6,189	—	—	6,189
Foreign currency translation adjustment	—	—	—	—	(1,144)	(1,144)
Net pension gain	—	—	—	—	5	5
Net unrealized gain on marketable securities, net of tax	—	—	—	—	494	494
Net loss	—	—	—	(104,163)	—	(104,163)
Balances at September 30, 2023	177,279,675	$ 1,773	$ 1,485,811	$ (1,346,081)	$ (6,581)	$ 134,922

	Nine Months Ended September 30, 2023					
	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Total Stockholders' Equity
	Shares	Amount				
Balances at December 31, 2022	166,793,320	$ 1,668	$ 1,450,239	$ (1,148,545)	$ (8,404)	$ 294,958
Issuance of common stock in at-the-market offering, net of offering expenses	8,249,261	83	15,023	—	—	15,106
Issuance of common stock upon exercise of stock options and vesting of restricted stock units, net of tax	1,481,508	15	(1,419)	—	—	(1,404)
Issuance of common stock under employee stock purchase plan	755,586	7	712	—	—	719
Stock-based compensation	—	—	21,256	—	—	21,256
Foreign currency translation adjustment	—	—	—	—	981	981
Net pension gain	—	—	—	—	2	2
Net unrealized gain on marketable securities, net of tax	—	—	—	—	840	840
Net loss	—	—	—	(197,536)	—	(197,536)
Balances at September 30, 2023	177,279,675	$ 1,773	$ 1,485,811	$ (1,346,081)	$ (6,581)	$ 134,922

See accompanying Notes to Condensed Consolidated Financial Statements.

SANGAMO THERAPEUTICS, INC.

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

	Nine Months Ended September 30,	
	2024	2023
Operating Activities:		
Net loss	$ (74,545)	$ (197,536)
Adjustments to reconcile net loss to net cash used in operating activities:		
Impairment of long-lived assets	5,521	65,232
Depreciation and amortization	3,866	13,238
Accretion of discount and impairment on marketable securities	(273)	(2,031)
Amortization in operating lease right-of-use assets	3,360	5,945
Stock-based compensation	9,099	21,256
Other non-cash adjustments	(4)	1,119
Impairment of goodwill and indefinite-lived intangible assets	—	89,485
Deferred income tax benefit	18	(6,195)
Net changes in operating assets and liabilities:		
Interest receivable	402	192
Accounts receivable	(9,573)	2,530
Prepaid expenses and other assets	6,403	5,159
Accounts payable and other accrued liabilities	(6,851)	(5,220)
Accrued compensation and employee benefits	2,060	(4,182)
Lease liabilities	(4,081)	(3,737)
Other non-current liabilities	36	112
Deferred revenues	774	(159,671)
Net cash used in operating activities	(63,788)	(174,304)
Investing Activities:		
Purchases of marketable securities	—	(59,551)
Maturities of marketable securities	1,110	193,858
Proceeds from sale of marketable securities	34,730	—
Proceeds from sale of assets classified as held for sale	475	—
Purchases of property and equipment	(115)	(18,484)
Net cash provided by investing activities	36,200	115,823
Financing Activities:		
Proceeds from issuance of common stock, net of offering expenses	21,924	—
Proceeds from at-the-market offering, net of offering expenses	—	15,106
Taxes paid related to net share settlement of equity awards	(684)	(1,404)
Proceeds from issuance of common stock under employee stock purchase plan	146	719
Net cash provided by financing activities	21,386	14,421
Effect of exchange rate changes on cash, cash equivalents, and restricted cash	199	130
Net decrease in cash, cash equivalents, and restricted cash	(6,003)	(43,930)
Cash, cash equivalents, and restricted cash, beginning of period	46,704	101,944
Cash, cash equivalents, and restricted cash, end of period	$ 40,701	$ 58,014
Supplemental cash flow disclosures:		
Property and equipment included in unpaid liabilities	$ 389	$ 2,757

See accompanying Notes to Condensed Consolidated Financial Statements.

SANGAMO THERAPEUTICS, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

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

Organization and Description of Business

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 genomic medicine company committed to translating ground-breaking science into medicines that transform the lives of patients and families afflicted with serious neurological diseases. The Company believes its zinc finger ("ZF") epigenetic regulators are ideally suited to potentially address devastating neurology disorders and its capsid engineering platform has demonstrated the ability to expand delivery beyond currently available intrathecal delivery capsids, including in the central nervous system ("CNS"), in preclinical studies.

In 2023, the Company announced its strategic transformation into a neurology-focused genomic medicine company focused on developing epigenetic regulation therapies designed to address serious neurological diseases and novel adeno-associated virus ("AAV") capsid delivery technology.

Basis of Presentation

The accompanying unaudited Condensed Consolidated Financial Statements have been prepared in conformity 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 United States 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 only 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 and nine months ended September 30, 2024 are not necessarily indicative of the results that may be expected for the year ending December 31, 2024. The Condensed Consolidated Balance Sheet data at December 31, 2023 was derived from the audited Consolidated Financial Statements included in Sangamo's Annual Report on Form 10-K for the year ended December 31, 2023 (the "2023 Annual Report") as filed with the SEC on March 13, 2024.

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.

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, 2023, included in the 2023 Annual Report.

Liquidity, Going Concern, and Capital Resources

Sangamo is currently working on a number of long-term development projects that involve experimental technologies. The projects will require several years and substantial expenditures to complete and ultimately may be unsuccessful. In recent years, the Company's operations have been funded primarily through collaborations and strategic partnerships, research grants and from the issuance of equity securities. As of September 30, 2024, the Company had capital resources of $39.2 million consisting of cash and cash equivalents. On August 2, 2024, the Company entered into a global epigenetic regulation and capsid delivery license agreement (the "Genentech Agreement") with Genentech, Inc., a member of the Roche Group ("Genentech"), under which the Company received a $40.0 million upfront license fee in August 2024 and a $10.0 million milestone payment in October 2024.

Under Accounting Standard Codification ("ASC") Topic 205-40, Presentation of Financial Statements—Going Concern ("ASC Topic 205-40"), the Company has the responsibility to evaluate whether conditions and/or events raise substantial doubt about its ability to meet its future financial obligations as they become due within one year after the date that the Condensed Consolidated Financial Statements are issued. As required under ASC Topic 205-40, management's evaluation should initially not take into consideration the potential mitigating effects of management's plans that have not been fully implemented as of the date the Condensed Consolidated Financial Statements are issued. When substantial doubt exists, management evaluates whether the mitigating effects of its plans sufficiently alleviates the substantial doubt about the Company's ability to continue as a going concern. The mitigating effects of management's plans, however, are only considered if both (i) it is probable that the plans will be effectively implemented within one year after the date that the financial statements are issued, and (ii) it is probable that the

plans, when implemented, will mitigate the relevant conditions or events that raise substantial doubt about the entity's ability to continue as a going concern within one year after the date that the financial statements are issued. Generally, to be considered probable of being effectively implemented, the plans must have been approved by the Company's board of directors before the date that the financial statements are issued.

The Company's history of significant losses, its negative cash flows from operations, its limited liquidity resources currently on hand, and its dependence on additional financing to fund its operations after the current resources are exhausted raise substantial doubt about its ability to continue to operate as a going concern within one year after the date that the Condensed Consolidated Financial Statements are issued. Based on the Company's current operating plan, its cash and cash equivalents as of September 30, 2024, together with the $10.0 million milestone payment that the Company received from Genentech in October 2024, is expected to allow the Company to meet its liquidity requirements only into the first quarter of 2025, which is less than one year following the date these Condensed Consolidated Financial Statements are issued.

Successful completion of the Company's development programs and, ultimately, the attainment of profitable operations are dependent upon future events, including obtaining adequate financing to support the Company's cost structure and operating plan. Management's plans include, among other things, pursuing one or more of the following steps to raise additional capital, none of which can be guaranteed or are entirely within the Company's control:

- raise funding through the sale of the Company's common stock, including sales under the at-the-market offering program with Jefferies LLC;
- raise funding through debt or royalty financing; and
- establish collaborations with potential partners to advance the Company's product pipeline.

If the Company is unable to raise capital on acceptable terms, or at all, or if it is unable to procure collaboration arrangements or external direct investments to advance its programs, the Company would be required to discontinue some or all of its operations or develop and implement a plan to further extend payables, reduce overhead or scale back its current operating plan until sufficient additional capital is raised to support further operations. There can be no assurance that such a plan would be successful. Additional capital may not be available to the Company on a timely basis, on terms that are acceptable or at all. In particular, the perception of the Company's ability to continue to operate as a going concern may make it more difficult to obtain financing for the continuation of its operations, particularly in light of currently challenging macroeconomic and market conditions. Further, the Company may be unable to attract new investments as a result of the speculative nature of its newly reprioritized core neurology preclinical programs. If adequate funds are not available to the Company on a timely basis, or at all, the Company will be required to take additional actions to address its liquidity needs, including additional cost reduction measures such as further reducing operating expenses and delaying, reducing the scope of, discontinuing or altering its research and development activities, which would have a material adverse effect on its business and prospects, or the Company may be required to cease operations entirely, liquidate all or a portion of its assets, and/or seek protection under the U.S. Bankruptcy Code.

The accompanying Condensed Consolidated Financial Statements have been prepared assuming the Company will continue to operate as a going concern, which contemplates the realization of assets and the settlement of liabilities in the normal course of business. The Condensed Consolidated Financial Statements do not include any adjustments to reflect the possible future effects on the recoverability and classification of assets or the amounts of liabilities that may result from uncertainty related to the Company's ability to continue as a going concern.

Summary of Significant Accounting Policies

Use of Estimates

The preparation of 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, income taxes, fair value of assets and liabilities, useful lives and impairment of long-lived assets, 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.

In March 2023, the Company recorded additional revenue related to a change in estimate in connection with the collaboration agreement with Kite Pharma, Inc., a Gilead Sciences, Inc. subsidiary ("Kite"). This adjustment was driven by a reduction in the estimated future level of the Company's research and development services and as a result, future project costs. This resulted in an increase in proportional cumulative performance on this collaboration and an increase in revenue of

$8.9 million, a decrease in net loss of $8.9 million, and a decrease in the Company's basic and diluted net loss per share of $0.05 for the nine months ended September 30, 2023.

In September 2023, the Company recorded additional revenue related to a change in estimate in connection with the collaboration agreement with Kite. This adjustment was driven by a further reduction in the estimated future level of the Company's research and development services and as a result, future project costs. This resulted in an increase in proportional cumulative performance on this collaboration and an increase in revenue by $4.9 million, a decrease in net loss by $4.9 million, and a decrease in the Company's basic and diluted net loss per share of $0.03 for the three and nine months ended September 30, 2023.

Revenue Recognition

The Company accounts for its revenues pursuant to the provisions of 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 services. Research and license agreements typically include nonrefundable upfront signing or license fees, payments at negotiated rates for time incurred by Company researchers, third-party cost reimbursements, additional target selection fees, sublicense fees, milestone payments tied to ongoing development and product commercialization, and royalties on future licensees' product sales. All funds received from the Company's collaboration partners are generally not refundable. Non-refundable upfront fees are fixed at the commencement of the contract. All other fees represent variable consideration in contracts. For contracts that contain a provision where the Company reimburses its customer for certain costs they incur and where the Company does not acquire any distinct goods or services in exchange for such payments, the Company accounts for it as a reduction to the contract transaction price. Deferred revenue primarily represents the portion of nonrefundable upfront fees or milestone 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.

The Company's performance obligations in its collaboration agreements frequently represent distinct bundles of licenses of intellectual property and research and development services, with these components being individually non-distinct as the customer cannot benefit from the licenses independently from the research and development activities. In some instances, the Company has determined that the customer can benefit from the licensed intellectual property separately from the research and development activities, and the licenses of intellectual property and research and development services are individual distinct performance obligations. Options to license the Company's intellectual property and/or acquire research and development services also represent performance obligations when they grant customers a material right, e.g. a right to a discount the customer would not have received if they did not purchase the Company's services under the existing contract.

Revenues from grants of licenses to intellectual property that are distinct and therefore separate performance obligations are recognized at the point in time when the license is effective and the Company has completed the transfer of a copy of the licensed intellectual property to the customer. Revenues from distinct research and development services as well as from distinct bundles of licenses of intellectual property and research and development services, are recognized over time using a proportional performance method. Under this method, revenue is recognized by measuring progress towards satisfaction of the relevant performance obligation using a measure that best depicts the progress towards satisfaction of the relevant performance obligation. For most of the Company's agreements the measure of progress is an input measure based on a level of effort incurred, which includes the value of actual time by Company researchers plus third-party cost reimbursements.

Consideration allocated to options that include material rights is deferred until the options are exercised or expire. The exercise of such options is accounted for as contract continuation, with target selection fees and estimated variable consideration included in the transaction price at that time and allocated specifically to the respective target's performance 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. 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. For variable consideration, 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. A cumulative catch-up is then recorded in the current period to reflect the updated transaction price and the updated measure of progress. The estimated period

of performance and level of effort, including the value of Company researchers' time and third-party costs, are reviewed quarterly and adjusted, as needed, to reflect the Company's current expectations.

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, discount rates and probabilities of exercise of technical and regulatory success, and the expected level of effort for research and development services.

Contract modifications occur when the price and/or scope of an arrangement changes. If the modification consists of adding new distinct goods or services in exchange for consideration that reflects standalone selling prices of these goods and services, the modification is accounted for as a separate contract with the customer. Otherwise, if the remaining goods and services are distinct from those previously provided, the existing contract is considered terminated, and the remaining consideration is allocated to the remaining goods and services as if this was a newly signed contract. If the remaining goods and services are not distinct from those previously provided, the effects of the modification are accounted for in a manner similar to the effect of a change in the estimated measure of progress, with cumulative catch-up in revenue recorded at the time of the modification. If some of the remaining goods and services are distinct from those previously provided and others are not, to account for the effects of the modification the Company applies principles consistent with the objectives of the modification accounting.

Revenues from collaboration and license agreements as a percentage of total revenues were as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2024	2023	2024	2023
Genentech, Inc.	100 %	— %	98 %	— %
Kite Pharma, Inc.	— %	58 %	— %	11 %
Biogen MA, Inc.	— %	4 %	— %	77 %
Novartis Institutes for BioMedical Research, Inc.	— %	— %	— %	7 %
Other license agreements	— %	38 %	2 %	5 %

Impairment

The Company evaluates the carrying value of long-lived assets, which include property and equipment, leasehold improvements and right-of-use assets, for impairment whenever events or changes in circumstances indicate that the carrying amounts of the asset may not be fully recoverable. If a change in circumstance occurs that indicates long-lived assets may be impaired, the Company performs a test of recoverability by comparing the carrying value of the asset or asset group to its undiscounted expected future cash flows. The long-lived asset evaluation is performed at the asset group level, i.e., the lowest level for which identifiable cash flows are largely independent of the cash flows of other assets and liabilities. The Company reassesses the composition of its asset groups whenever there are changes in its operations that affect whether the cash flows associated with assets included in asset groups are largely independent. If the impairment review indicates that the carrying amount of an asset group is not recoverable, an impairment loss is measured as the amount by which the carrying amount of an asset group exceeds its fair value. Any impairment loss is allocated to the long-lived assets of the group on a pro rata basis using the relative carrying amounts of those assets, except that the carrying amount of an individual asset shall not be reduced below its fair value.

Factors that may indicate potential impairment and trigger an impairment test include, but are not limited to, general macroeconomic conditions, conditions specific to the industry and market, an adverse change in legal factors, business climate or operational performance of the business, and sustained decline in the stock price and market capitalization compared to the net book value.

Calculating the fair value of a reporting unit, an asset group and an individual asset involves significant estimates and assumptions. These estimates and assumptions include, among others, projected future cash flows, risk-adjusted discount rates, future economic and market conditions, and the determination of appropriate market comparables. Changes in these factors and assumptions used can materially affect the amount of impairment loss recognized in the period the asset was considered impaired.

During a portion of the nine months ended September 30, 2023, the Company had goodwill and indefinite-lived intangible assets (IPR&D). These assets were written off in full as the Company recognized impairment losses during the nine months ended September 30, 2023, see Note 6 – *Impairment and Write-Down of Assets Held For Sale*.

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, deposits in money market accounts and U.S. government-sponsored entity debt securities. Restricted cash consisted of a letter of credit for $1.5 million, representing a deposit for the lease of office and research and development laboratory facilities in Brisbane, California.

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

	September 30, 2024	December 31, 2023	September 30, 2023	December 31, 2022
Cash and cash equivalents	$ 39,201	$ 45,204	$ 56,514	$ 100,444
Non-current restricted cash	1,500	1,500	1,500	1,500
Cash, cash equivalents, and restricted cash as reported within the Condensed Consolidated Statements of Cash Flows	$ 40,701	$ 46,704	$ 58,014	$ 101,944

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 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. Right-of-use 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, calculated as the sum of the amortization of the right of use asset and accretion of the lease liability, is recognized on a straight-line basis over the lease term, unless the right of use asset was previously written down due to impairment. The Company evaluates the lease arrangement for impairment whenever events or changes in circumstances indicate that the carrying amounts of the right-of-use asset may not be fully recoverable. To the extent an impairment of the right-of-use asset is identified, the Company will recognize the impairment expense and subsequently amortize the remaining right of use asset into rent expense on a straight-line basis (unless another systematic basis is more representative of the pattern in which the Company expects to consume the future economic benefits from the asset) from the date of impairment to the earlier of the end of the right-of-use asset's useful life or the end of the lease term.

If there is a change to the terms and conditions of a contract that results in a change in the scope of or the consideration for a lease, the Company determines if the lease modification results in a separate contract or a change in the accounting for the existing lease and not a separate contract. For lease modifications that result in a separate contract, the Company accounts for the new contract in the same manner as other new leases. For lease modifications that do not result in a separate contract, the Company reassesses the classification of the lease at the effective date of the modification, remeasures and reallocates the remaining consideration in the contract, and remeasures the lease liability using the discount rate determined at the effective date of the modification.

The Company has elected not to 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 not to 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.

Warrants to Purchase Shares of Company Stock

The Company determines the accounting classification of warrants to purchase shares of its stock as either liability or equity by first assessing whether the warrants meet liability classification criteria in accordance with ASC 480, *Distinguishing Liabilities from Equity* ("ASC 480"). Under ASC 480, a financial instrument other than an outstanding share that embodies an obligation to repurchase the entity's shares or is indexed to such an obligation, and that requires or may require the entity to settle it by transferring assets, is classified as a liability. In addition, a financial instrument that embodies an unconditional obligation, or

a financial instrument other than an outstanding share that embodies a conditional obligation, that the issuer must or may settle by issuing a variable number of its equity shares must be classified as a liability (or an asset in some circumstances) if, at inception, the monetary value of the obligation is based solely or predominantly on any one of the following: (a) a fixed monetary amount known at inception, (b) variations in something other than the fair value of the issuer's equity shares, or (c) variations inversely related to changes in the fair value of the issuer's equity shares.

If financial instruments, such as warrants, are not required to be classified as liabilities under ASC 480, the Company assesses whether such instruments are indexed to the Company's own stock under ASC 815-40. In order for an instrument to be considered indexed to an entity's own stock, its settlement amount must always equal the difference between the following: (a) the fair value of a fixed number of the Company's equity shares, and (b) a fixed monetary amount or a fixed amount of a debt instrument issued by the Company. Certain adjustments to this amount are allowed, if they are based on non-levered inputs into the fair value of a fixed price/fixed consideration-option.

Warrants are also required to meet equity classification criteria to be classified in stockholders' equity. Under these criteria, warrants have to provide for settlement in shares, or cash or shares at the entity's option. With limited exceptions, a possibility of net cash settlement under any circumstances will result in the warrants being classified as liabilities.

Warrants classified as equity are generally measured using the Black-Scholes valuation model on the date of issuance. Warrants classified as liabilities are remeasured at any reporting date using valuation models consistent with their terms, with changes recognized in earnings.

Restructuring

The Company records employee severance costs based on whether the termination benefits are provided under an on-going benefit arrangement or under a one-time benefit arrangement. The Company accounts for on-going termination benefit arrangements, such as those arising from employment agreements, applicable regulations or past practices, in accordance with ASC Topic 712, *Compensation—Nonretirement Postemployment Benefits* ("ASC Topic 712"). Under ASC 712, liabilities for post-employment benefits related to past services and that vest or are accumulated over time are recorded at the time the obligations are probable of being incurred and can be reasonably estimated. The Company accounts for one-time employment benefit arrangements in accordance with ASC Topic 420, *Exit or Disposal Cost Obligations* ("ASC Topic 420"). One-time termination benefits are expensed at the date the entity notifies the employee, unless the employee must provide future service over a period extending past the minimum notification period, in which case the benefits are expensed ratably over the future service period. Other associated costs are recognized in the period in which the liability is incurred.

Costs incurred to terminate contracts are recognized upon their termination, e.g., when notice of termination is provided to the counterparty. Costs related to contracts without future benefit are recognized at the cease-use date. Other exit-related costs are recognized as incurred.

Recent Accounting Pronouncements Not Yet Adopted

In November 2023, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2023-07, *Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures* ("ASU 2023-07"), which requires public entities to disclose information about their reportable segments' significant expenses and other segment items on an interim and annual basis. Public entities with a single reportable segment are required to apply the disclosure requirements in ASU 2023-07, as well as all existing segment disclosures and reconciliation requirements in ASC Topic 280, *Segment Reporting* on an interim and annual basis. ASU 2023-07 is effective for fiscal years beginning after December 15, 2023, and for interim periods within fiscal years beginning after December 15, 2024, with early adoption permitted. The Company is currently evaluating the impact of adopting ASU 2023-07.

In December 2023, the FASB issued ASU 2023-09, *Income Taxes (Topic 740): Improvements to Income Tax Disclosures* ("ASU 2023-09"), which requires public entities, on an annual basis, to provide disclosure of specific categories in the rate reconciliation, as well as disclosure of income taxes paid disaggregated by jurisdiction. ASU 2023-09 is effective for fiscal years beginning after December 15, 2024, with early adoption permitted. The Company is currently evaluating the impact of adopting ASU 2023-09.

NOTE 2—FAIR VALUE MEASUREMENTS

The Company measures certain financial assets and liabilities at fair value on a recurring basis, including cash equivalents and marketable securities. 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 Company had no cash equivalents or marketable securities as of September 30, 2024. The fair value measurements of the Company's cash equivalents and marketable securities as of December 31, 2023 are identified at the following levels within the fair value hierarchy (in thousands):

	December 31, 2023			
	Fair Value Measurements			
	Total	Level 1	Level 2	Level 3
Assets:				
Cash equivalents:				
Money market funds	$ 2,508	$ 2,508	$ —	$ —
Total	2,508	2,508	—	—
Marketable securities:				
U.S. government-sponsored entity debt securities	22,566	—	22,566	—
Commercial paper securities	2,826	—	2,826	—
Corporate debt securities	1,405	—	1,405	—
Asset-backed securities	2,377	—	2,377	—
U.S. treasury bills	5,593	—	5,593	—
Certificates of deposit	1,031	—	1,031	—
Total	35,798	—	35,798	—
Total cash equivalents and marketable securities	$ 38,306	$ 2,508	$ 35,798	$ —

Cash Equivalents and Marketable Securities

The Company generally classifies its marketable securities 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.

NOTE 3—CASH EQUIVALENTS AND MARKETABLE SECURITIES

The Company had no cash equivalents or marketable securities as of September 30, 2024. The table below summarizes the Company's cash equivalents and marketable securities as of December 31, 2023 (in thousands):

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
December 31, 2023				
Assets				
Cash equivalents:				
Money market funds	$ 2,508	$ —	$ —	$ 2,508
Total	2,508	—	—	2,508
Marketable securities:				
U.S. government-sponsored entity debt securities	22,347	219	—	22,566
Commercial paper securities	2,825	2	(1)	2,826
Corporate debt securities	1,399	6	—	1,405
Asset-backed securities	2,368	9	—	2,377
U.S. treasury bills	5,599	—	(6)	5,593
Certificates of deposit	1,026	5	—	1,031
Total	35,564	241	(7)	35,798
Total cash equivalents and marketable securities	$ 38,072	$ 241	$ (7)	$ 38,306

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

	December 31, 2023
Maturing in one year or less	$ 10,855
Maturing after one year through five years	24,943
Total	$ 35,798

Realized gains and losses on the sales of investments were not material during the three and nine months ended September 30, 2024. There were no realized gains and losses on the sales of investments during the three and nine months ended September 30, 2023. Total unrealized gains for securities with net gains in accumulated other comprehensive loss were not material during the three and nine months ended September 30, 2024 and 2023.

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 related to its marketable securities for the three and nine months ended September 30, 2024 and 2023.

The Company had no unrealized losses related to its marketable securities for the three and nine months ended September 30, 2024. The Company had no material unrealized losses related to its marketable securities for the three and nine months ended September 30, 2023. The Company had no material unrealized losses, individually and in the aggregate, for marketable securities that were in a continuous unrealized loss position for greater than 12 months as of September 30, 2024 and December 31, 2023. These unrealized losses were not attributed to credit risk and were associated with changes in market conditions. The Company periodically reviews its marketable securities for indications of credit losses. No significant facts or circumstances had arisen to indicate that there had 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, the Company determined that no allowance for credit losses related to its marketable securities was required at either September 30, 2024 or December 31, 2023.

For the periods the Company had investment in debt securities, the Company also considered whether it was more likely than not that the Company will be required to sell the debt securities before recovery of their amortized cost basis. No impairment charges were recorded during the three and nine months ended September 30, 2024.

NOTE 4—BASIC AND DILUTED NET INCOME (LOSS) PER SHARE

Basic net income (loss) per share has been computed by dividing net income (loss) by the weighted-average number of shares of common stock outstanding during the period. Diluted net income (loss) per share is calculated by dividing net income

(loss) by the weighted-average number of shares of common stock plus potentially dilutive securities outstanding during the period. Potential shares of common stock exercisable for little or no consideration are included in both basic and diluted weighted-average number of shares of common stock outstanding. During the three months ended September 30, 2024, basic and diluted weighted-average number of shares outstanding were 208.3 million and 214.3 million shares, respectively. During the nine months ended September 30, 2024, both basic and diluted weighted-average number of shares outstanding were 198.8 million shares, and included pre-funded warrants to purchase 3,809,523 shares of common stock with an exercise price of $0.01 per share. These warrants were exercised during the three months ended June 30, 2024.

The components of basic and diluted net income (loss) per share are as follows (in thousands, except per share amounts):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2024	2023	2024	2023
Numerator:				
Net income (loss)	$ 10,672	$ (104,163)	$ (74,545)	$ (197,536)
Less: Net income allocated to participating securities	1,287	—	—	—
Net income (loss) available to common stockholders	$ 9,385	$ (104,163)	$ (74,545)	$ (197,536)
Denominator:				
Basic:				
Weighted average number of common shares outstanding - basic	208,345	177,171	198,849	173,375
Diluted:				
Weighted average number of common shares outstanding - basic	208,345	177,171	198,849	173,375
Dilutive effect of restricted stock units	5,823	—	—	—
Dilutive effect of common stock pursuant to employee stock purchase plan	157	—	—	—
Weighted average number of common shares outstanding - diluted	214,325	177,171	198,849	173,375
Net income (loss) per share:				
Basic	$ 0.05	$ (0.59)	$ (0.37)	$ (1.14)
Diluted	$ 0.04	$ (0.59)	$ (0.37)	$ (1.14)

Warrants to purchase shares of common stock, with the exercise price of $1.00 per share, entitle holders to participate in dividends but are not required to absorb losses incurred. As a result, for the three months ended September 30, 2024, the Company applied the two-class method to allocate net income to shares of common stock and these warrants for purposes of calculating basic and diluted net income per share. The warrants were excluded from basic net loss per share calculations during the nine months ended September 30, 2024. No warrants were outstanding during the three and nine months ended September 30, 2023.

The computation of diluted net income per share for the three months ended September 30, 2024 excluded 12.7 million shares subject to stock options and restricted stock units outstanding because their inclusion would have had an anti-dilutive effect on diluted net income per share. The computation of diluted net loss per share for the nine months ended September 30, 2024 excluded 51.6 million shares subject to stock options, restricted stock units outstanding, warrants to purchase common stock, and the employee stock purchase plan shares reserved for issuance because their inclusion would have had an anti-dilutive effect on diluted net loss per share. The computation of diluted net loss per share for the three and nine months ended September 30, 2023 excluded 22.1 million shares subject to stock options, restricted stock units outstanding, and the employee stock purchase plan shares reserved for issuance because their inclusion would have had an anti-dilutive effect on diluted net loss per share.

NOTE 5—MAJOR CUSTOMERS, PARTNERSHIPS AND STRATEGIC ALLIANCES

Genentech, Inc.

In August 2024, the Company entered into a global epigenetic regulation and capsid delivery license agreement with Genentech to develop intravenously administered genomic medicines to treat certain neurodegenerative diseases. Under the terms of the agreement, the Company granted an exclusive license to Genentech for the Company's proprietary zinc finger repressors ("ZFRs") that are directed to tau and a second undisclosed neurology target. The Company also granted an exclusive license to Genentech to the Company's proprietary, neurotropic adeno-associated virus capsid, STAC-BBB, for use with therapies directed to tau and to the second neurology target. The Company is prohibited from exploiting (for itself or with or for a third party)

products directed to tau and to the second neurology target during the applicable exclusivity periods set forth in the agreement. The Company was responsible for completing the technology transfer and certain preclinical activities, and Genentech is solely responsible for all clinical development, regulatory interactions, manufacturing and global commercialization of resulting products.

In August 2024, the Company received a $40.0 million upfront license payment from Genentech. In October 2024, the Company received a $10.0 million milestone payment related to the technology transfer which was completed in September 2024. Under the terms of the agreement, the Company is also eligible to earn up to $1.9 billion in development and commercial milestones spread across multiple potential products. In addition, the Company is also entitled to receive escalating, tiered mid-single digit to sub-teen double digit royalty payments on the net sales of such products, subject to adjustments for patent expiration, entry of competitive products to the market 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 date when there is no remaining royalty payment obligation in such country with respect to such product, at which time the agreement will expire with respect to such product in such country. Royalty obligations cease upon the later of expiry of the last valid patent claim covering the product in the country or 10 years from the date of the first commercial sale of the product in such country. Genentech has the right to terminate the agreement for convenience. Each party has the right to terminate the agreement on account of the other party's uncured material breach.

The Company assessed the agreement with Genentech in accordance with ASC Topic 606 and concluded that Genentech is a customer. The initial transaction price of $50.0 million includes the upfront license fee of $40.0 million and the $10.0 million technology transfer milestone payment. None of the development 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 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. Potential sales-based milestones and royalty payments are not estimated as they meet the sales-or usage-based royalty exception under ASC 606 and are recognized in the period they are earned, provided the related performance obligations have been completed.

The Company has identified two performance obligations within the Genentech Agreement. All licenses were accounted for as a performance obligation to provide functional IP that is satisfied at a point in time that was satisfied upon completion of the technology transfer in September 2024. The preclinical activities represent research and development services and are satisfied over time as the Company conducts and Genentech benefits from the associated activities. Revenue related to the preclinical activities is recognized using an input method of cumulative actual costs incurred relative to total estimated costs.

The Company allocated the initial transaction price to the performance obligations based on the relative standalone selling price of each performance obligation. In the absence of an observable standalone selling price, the Company used a methodology that maximized the use of observable inputs. This included a cost plus margin approach for the preclinical activities, which required the estimation of total costs and an expected margin. The standalone selling price of the licenses was determined based on the analysis of the probability-adjusted discounted cash flows and potential sales of licensed products. Significant estimates and assumptions were used that include but are not limited to, expected market opportunity and pricing, timelines, and likelihood of success of clinical, regulatory and commercialization activities. The Company expects to allocate variable consideration payable upon achievement of future milestones and royalty payments to the specific performance obligation to which they relate, i.e. the license performance obligation, as such allocation would meet the allocation objective in ASC Topic 606.

As of September 30, 2024, the Company had a receivable of $10.0 million related to the milestone payment which had been earned but not yet received, and deferred revenue of $0.8 million related to this agreement which is expected to be recognized over approximately the next three months.

Revenues recognized under the agreement were as follows (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2024	2023	2024	2023
Revenue related to Genentech agreement:				
Recognition of license revenue	$ 48,679	$ —	$ 48,679	$ —
Research services	547	—	547	—
Total	$ 49,226	$ —	$ 49,226	$ —

Pfizer Inc.

In May 2017, the Company entered into an exclusive global collaboration and license agreement with Pfizer Inc. ("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 was 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.

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.

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) 15 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 was 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. To date, two milestones of $55.0 million in aggregate have been earned and received. The Company is eligible to earn from Pfizer up to $220.0 million in remaining milestone payments for giroctocogene fitelparvovec, 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 14% - 20% of the annual worldwide 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.

The Company assessed the agreement with Pfizer in accordance with ASC Topic 606 and concluded that Pfizer was a customer. The Company completed its performance obligations and recognized the amounts included in the transaction price of $134.0 million during the periods through December 31, 2020. No revenue was recognized during the three and nine months ended September 30, 2024 and 2023. The remaining development, intellectual property and regulatory milestone amounts have not been included in the transaction price and have not been recognized as their achievement is dependent on the progress and outcomes of Pfizer's development activities and is therefore uncertain. If and when these milestones become probable of being achieved, they will be recognized in full at that time. Sales milestones and royalties are not recognized until triggered based on the contractual terms.

Alexion Pharmaceuticals, Inc., AstraZeneca Rare Disease

In December 2017, the Company entered into an exclusive, global collaboration and license agreement with Pfizer, subsequently assigned to Alexion, AstraZeneca Rare Disease ("Alexion") in September 2023, for the development and commercialization of potential gene therapy products that use zinc finger transcriptional regulators ("ZF-transcriptional regulators") to treat amyotrophic lateral sclerosis 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 ZF-transcriptional regulators 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 (now Alexion) 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 ZF-transcriptional regulators that satisfy pre-agreed criteria. During a specified period, neither the Company nor Alexion are permitted to research, develop, manufacture or commercialize outside of the collaboration any zinc finger proteins ("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) 15 years after the first commercial sale of a licensed product in a major market country. Alexion 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. Upon termination for any reason, the license granted by the Company to Alexion to develop, manufacture and commercialize licensed products under the agreement would automatically terminate. Upon termination by the Company for cause or by Alexion without cause for any licensed product or licensed products in any country or countries, the Company would have the right to negotiate with Alexion to obtain a non-exclusive, royalty-bearing license under certain technology controlled by Alexion to develop, manufacture and commercialize the licensed product or licensed products in the terminated country or countries.

Following any termination by the Company for Alexion's material breach, Alexion would not be permitted to research, develop, manufacture or commercialize ZFPs that specifically bind to the *C9ORF72* gene for a period of time. Following any termination by Alexion for the Company's material breach, the Company would 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 Alexion contingent on the achievement of specified preclinical development, clinical development and first commercial sale milestones, and up to $90.0 million in commercial milestone payments if annual worldwide net sales of the licensed products reach specified levels. In addition, Alexion will pay the Company royalties of 14% - 20% 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 is responsible for the cost of its performance of the research program. Alexion is operationally and financially responsible for subsequent development, manufacturing and commercialization of the licensed products. To date, a milestone of $5.0 million has been earned and paid, however no products have been approved and therefore no royalty fees have been earned under the *C9ORF72* agreement.

The Company assessed the agreement with Alexion in accordance with ASC Topic 606 and concluded that Alexion was a customer. The Company completed its performance obligations and recognized the amounts included in the transaction price of $17.0 million during the periods through December 31, 2020. No revenue was recognized during the three and nine months ended September 30, 2024 and 2023. The remaining development milestone amounts have not been included in the transaction price and have not been recognized as their achievement is dependent on the progress and outcomes of Alexion's development activities and is therefore uncertain. If and when these milestones become probable of being achieved, they would be recognized in full at that time. Sales related milestones and royalties are not recognized until triggered based on the contractual terms.

In October 2023, Pfizer notified the Company of Pfizer's assignment of the collaboration and license agreement to Alexion, AstraZeneca Rare Disease, pursuant to a definitive purchase and license agreement for preclinical gene therapy assets and enabling technologies that closed on September 20, 2023.

Other Collaboration and License Agreements

In 2024, the Company had a collaboration and license agreement with Kite and certain other license agreements. In 2023, in addition to the agreement with Kite, the Company had collaboration and license agreements with Novartis Institutes for BioMedical Research, Inc. ("Novartis"), and Biogen MA, Inc. ("Biogen"). These collaboration agreements were designed for the research, development, and commercialization of various potential therapy products, including potential engineered cell therapies for cancer and gene regulation therapies to treat neurodevelopmental disorders and diseases. The collaboration agreements with Novartis and Biogen were both terminated effective June 2023. The Company's services under the Kite collaboration agreement were completed during the year ended December 31, 2023, and the agreement expired pursuant to its terms in April 2024.

The Company assessed each of these collaboration agreements in accordance with ASC Topic 606, concluding Kite, Novartis and Biogen were customers.

Revenues recognized under these agreements were as follows (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2024	2023	2024	2023
Revenue related to Kite agreement:				
Recognition of license fee fixed consideration	$ —	$ 5,388	$ —	$ 17,938
Research services variable consideration	—	108	—	1,097
Total	$ —	$ 5,496	$ —	$ 19,035
Revenue related to Novartis agreement:				
Recognition of upfront license fee	$ —	$ —	$ —	$ 9,568
Research services	—	—	—	2,611
Total	$ —	$ —	$ —	$ 12,179
Revenue related to Biogen agreement:				
Recognition of license and other fixed consideration	$ —	$ —	$ —	$ 132,165
Cost-sharing payments for research services, net variable consideration	—	—	—	2,684
Total	$ —	$ —	$ —	$ 134,849
Revenue from other license agreements	$ 186	$ 3,902	$ 1,023	$ 8,127
Total revenue	$ 186	$ 9,398	$ 1,023	$ 174,190

As of September 30, 2024 and December 31, 2023, the Company had no material receivables, no deferred revenue, and no amounts included in transaction price remaining to be recognized related to these license and collaboration agreements.

NOTE 6—IMPAIRMENT AND WRITE-DOWN OF ASSETS HELD FOR SALE

During the year ended December 31, 2023, the Company experienced a sustained decline in stock price and related market capitalization, the collaboration agreements with Biogen and Novartis were terminated, and actions were initiated including deferral and reprioritization of certain research and development programs, announcement and execution of restructuring of operations and reductions in force. As a result, throughout the year the Company tested various long-lived and indefinite-life intangible assets for impairment and recognized a pre-tax goodwill impairment charge of $38.1 million, a pre-tax indefinite-lived intangible asset impairment charge of $51.4 million along with the income tax benefit from the reduction of the associated deferred tax liability of $6.3 million, and a pre-tax long-lived assets impairment charge of $65.5 million during the year ended December 31, 2023.

Nine months ended September 30, 2024

During the three months ended March 31, 2024, the Company's Board of Directors approved the wind-down of operations in France and corresponding reduction in workforce, including closure of the Company's cell therapy manufacturing facility and research labs in Valbonne, France (the "France Restructuring"), and also initiated several actions aimed at reducing costs, including actions to commence the closure of its facility in Brisbane, California. As such, the Company reassessed its long-lived assets for impairment as of March 31, 2024.

In connection with the France Restructuring, the Company concluded its equipment, furniture and fixtures located in France met the held for sale criteria as of March 31, 2024. The Company wrote down the carrying value of these assets to their estimated fair value of $1.0 million, net of the estimated costs to sell, recognizing a loss of $1.8 million. The fair value measurement represents a level 3 nonrecurring fair value measurement. The loss is included in impairment of long-lived assets in the accompanying Condensed Consolidated Statements of Operations.

The Company also reassessed whether its remaining long-lived assets continued to represent a single asset group for purposes of impairment assessment. After considering changes in the manner in which the right-of-use assets and leasehold improvements related to the Company's Brisbane and Valbonne, France, facilities are used, costs incurred to cease use of these assets, the France Restructuring, and the Company's activities to market these facilities for sublease, the Company concluded the identifiable operations and cash flows of these assets are now largely independent of the operations and the cash flows of each other, as well as of the remainder of the Company. Accordingly, the Company assessed impairment of the resulting asset groups separately.

Based on the changes in the use of assets related to the Brisbane and Valbonne facility leases, the Company concluded there were indicators of impairment for these asset groups, and further established that the carrying values of these asset groups were not recoverable. The Company proceeded to determine their fair values using a discounted cash flow method, which represents a level 3 nonrecurring fair value measurement. As a result, the Company recognized pre-tax long-lived asset impairment charges of $2.0 million on the right-of-use assets and $0.5 million on the related leasehold improvements during the three months ended March 31, 2024. No impairment was recognized on the remaining long-lived assets, as their carrying values were not in excess of their fair values.

During the three months ended June 30, 2024, the Company faced a sustained decline in its stock price and related market capitalization, and continued the France Restructuring and activities related to the closure of its facility in Brisbane, California. There was also a decline in the market rates for facility subleases in Brisbane, California, indicating the carrying values of right of use and leasehold improvement assets could be impaired. As such, the Company reassessed its long-lived assets for impairment as of June 30, 2024.

The Company concluded there were indicators of impairment for the Brisbane and Valbonne facility lease asset groups, and further established that the carrying values of these asset groups were not recoverable. The Company proceeded to determine their fair values using a discounted cash flow method, which represents a level 3 nonrecurring fair value measurement. As a result, the Company recognized pre-tax long-lived asset impairment charges of $0.9 million on the right-of-use assets and $0.1 million on the related leasehold improvements during the three months ended June 30, 2024.

The Company also reassessed the fair value of assets held for sale as of June 30, 2024 and recorded an additional charge to write-down the carrying value of these assets by $0.1 million. Assets held for sale are included within prepaid expenses and other current assets on the Company's Condensed Consolidated Balance Sheet as of June 30, 2024. The fair value measurement represents a level 3 nonrecurring fair value measurement. The loss is included in impairment of long-lived assets in the accompanying Condensed Consolidated Statements of Operations. The sale of these assets is expected to occur within one year, either collectively or separately.

During the three months ended September 30, 2024, no additional impairment was recorded.

The Company will continue to assess whether its long-lived assets are impaired in future periods. As the Company finalizes the wind-down of its France operations and corresponding reduction in force of all France employees, as well as the closure of its Brisbane facility, it is reasonably possible that additional impairment charges will be recognized, for example, if sublease rates of leased facilities or selling prices of the assets held for sale are less than those estimated.

Nine months ended September 30, 2023

During the three months ended March 31, 2023, as a result of the sustained decline in the Company's stock price and related market capitalization, and termination of the collaboration agreements with Biogen and Novartis, the Company performed an impairment assessment of goodwill, indefinite-lived intangible assets, and other long-lived assets.

The Company operated as a single reporting unit based on its business and reporting structure. For goodwill, a quantitative impairment assessment was performed using a market approach, whereby the Company's fair value of equity was compared to its carrying value. The fair value of equity was derived using both the market capitalization of the Company and an estimate of a reasonable range of values of a control premium applied to the Company's implied business enterprise value. The control premium was estimated based upon control premiums observed in comparable market transactions. This represented a level 2 nonrecurring fair value measurement. Based on this analysis, the Company recognized a pre-tax goodwill impairment charge of $38.1 million during the three months ended March 31, 2023. As a result, the goodwill was fully impaired as of March 31, 2023.

Before completing the goodwill impairment assessment, the Company also tested its indefinite-lived intangible assets and then its long-lived assets for impairment. Based on the qualitative assessment, the Company determined it was more likely than not that its indefinite-lived intangible assets were not impaired. The Company determined all of its long-lived assets represented one asset group for purposes of long-lived asset impairment assessment. The Company concluded that the carrying value of the asset group was not recoverable as it exceeded the future undiscounted cash flows the assets were expected to generate from the use and eventual disposition. To allocate and recognize the impairment loss, the Company determined individual fair values of its long-lived assets. The Company applied a discounted cash flow method to estimate fair values of its leasehold improvements and right-of-use assets, including leasehold improvements in the process of construction and a cost replacement method to estimate the fair value of its furniture, fixtures and laboratory and manufacturing equipment. These represented level 3 nonrecurring fair value measurements. Based on this analysis, the Company recognized pre-tax long-lived asset impairment charges of $11.2 million on the right-of-use assets, $5.0 million on the related leasehold improvements, and $4.2 million on construction-in-progress, during the three months ended March 31, 2023. No impairment was recognized on the remaining long-lived assets as their carrying values were not in excess of their fair values.

During the three months ended June 30, 2023, the Company's stock price and the related market capitalization continued to decline. In April 2023, the Company announced a restructuring of operations and a corresponding reduction in force. The Company also initiated discussions around several actions aimed at reducing costs, preserving liquidity and improving operational performance metrics, including deferral and reprioritization of certain research and development programs, further reduction in force, and closing or downsizing its facilities.

The Company reassessed its indefinite-lived and long-lived assets for impairment as of June 30, 2023. Given the actions contemplated above, the Company determined that it was more likely than not that its indefinite-lived intangible assets were impaired. Accordingly, the Company developed an estimate of the fair value of its indefinite-lived intangible assets using the multi-period excess earnings model (income approach) and concluded the carrying value of its indefinite-lived intangible assets were fully impaired. This represents a level 3 nonrecurring fair value measurement. As a result, an indefinite-lived intangible assets impairment charge of $51.3 million, as well as the related income tax benefit of $6.3 million due to the reversal of a deferred tax liability associated with the indefinite-lived intangible assets was recognized during the three and six months ended June 30, 2023. The impairment charge was primarily driven by a higher discount rate applied to future cash flows based on market participants' view of increased risk related to the asset.

The Company determined that there were indicators of impairment in its long-lived asset group as of June 30, 2023, based on the same factors above as well as the impairment of its indefinite-lived intangible assets. As the estimated fair value of this asset group, based on a market approach, exceeded its carrying value, no impairment loss was recognized. This represented a level 3 nonrecurring fair value measurement.

During the three months ended September 30, 2023, the Company's stock price and the related market capitalization continued to decline, and as such, the Company reassessed its long-lived assets for impairment as of September 30, 2023.

The Company determined all of its long-lived assets continued to represent one asset group for purposes of long-lived asset impairment assessment. The Company concluded that the carrying value of the asset group was not recoverable and the estimated fair value of this asset group was below its carrying value. The lower fair value of the asset group was mainly driven by the sustained decline in the Company's stock price and the related market capitalization. To recognize the impairment loss, the Company determined individual fair values of its long-lived assets. The Company applied a discounted cash flow method to estimate fair values of its leasehold improvements and right-of-use assets, including leasehold improvements in the process of construction, and a market approach to estimate the fair value of its furniture, fixtures and laboratory and manufacturing equipment. These represented level 3 nonrecurring fair value measurements. Based on this analysis, the Company concluded the fair values of the long-lived assets were lower than their net book values due to declines in the market prices for leases, furniture, fixtures, and equipment. The Company recognized pre-tax long-lived asset impairment charges of $17.6 million on the right-of-use assets, $13.7 million on the related leasehold improvements and construction-in-progress, and $13.5 million on furniture, fixtures, and laboratory and manufacturing equipment during the three months ended September 30, 2023.

NOTE 7—COMMITMENTS AND CONTINGENCIES

Leases

On February 5, 2024, the Company entered into an amendment to the operating lease of office and research and development laboratory facilities in Brisbane, California. The amendment established early termination rights for the landlord upon thirty days' notice to the Company, with the earliest date the landlord may terminate the lease being September 30, 2024. Additionally, the amendment authorized the landlord to draw on the existing letter of credit to satisfy the majority of the Company's February 2024 through April 2024 rent payments and obligated the Company to provide a cash security deposit or replenish the letter of credit back to $1.5 million by June 1, 2024.

The Company concluded that the amendment represented a lease modification to be accounted for as a single contract with the existing lease under ASC Topic 842, *Leases*, and remeasured its lease liability using the current incremental borrowing rate of 9.6%, and recorded an adjustment to reduce both the lease liability and the corresponding right-of-use asset by $1.9 million as of the lease modification date.

On July 3, 2024, the Company entered into another amendment to extend the deadline for replenishing the letter of credit to September 30, 2024, the effect of which had no material impact to the Company's financial statements. The letter of credit was replenished during the three months ended September 30, 2024.

NOTE 8—STOCK-BASED COMPENSATION

The following table shows total stock-based compensation expense recognized in the accompanying Condensed Consolidated Statements of Operations (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2024	2023	2024	2023
Research and development	$ 1,478	$ 3,236	$ 4,186	$ 11,996
General and administrative	1,837	2,953	4,913	9,260
Total stock-based compensation expense	$ 3,315	$ 6,189	$ 9,099	$ 21,256

NOTE 9—STOCKHOLDERS' EQUITY

Common Stock

The Company's common stock authorized for issuance was 960,000,000 shares and 640,000,000 shares as of September 30, 2024 and December 31, 2023, respectively.

At-the-Market Offering Program

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. In December 2022, the Company entered into an amendment to the Open Market Sale Agreement℠ which increased the aggregate offering price under the at-the-market offering program by an additional $175.0 million. No shares were sold under the sales agreement during the three months ended September 30, 2023. During the nine months ended September 30, 2023, the Company sold 8,249,261 shares of its common stock for net proceeds of approximately $15.1 million. No shares were sold under the sales agreement during the three and nine months ended September 30, 2024. Approximately $194.5 million remained available under the sales agreement as of September 30, 2024.

Issuance and Sale of Common Stock and Warrants

On March 21, 2024, the Company entered into a Securities Purchase Agreement (the "Purchase Agreement") with certain institutional investors (collectively, the "Investors"). On March 26, 2024 the Company issued and sold in a registered direct offering (the "Registered Direct Offering") an aggregate of 24,761,905 shares of common stock of the Company, par value $0.01 per share, and pre-funded warrants to purchase up to an aggregate of 3,809,523 shares of common stock, together with accompanying warrants ("Common Warrants") to purchase up to an aggregate of 28,571,428 shares of common stock. The combined offering price of a unit consisting of one share of common stock and the accompanying Common Warrant to purchase one share of common stock was $0.84. The combined offering price of a unit consisting of a pre-funded warrant to purchase one share of common stock and the accompanying Common Warrant to purchase one share of common stock was $0.83. The pre-funded warrants are immediately exercisable at any time, until exercised in full, at a price of $0.01 per share of common stock. The Common Warrants are exercisable six months from issuance, expire five and a half years from the issuance date and have an exercise price of $1.00 per share. Both pre-funded warrants and Common Warrants can be exercised net in limited circumstances and entitle holders to dividends if and when paid by the Company.

Barclays Capital Inc. and Cantor Fitzgerald & Co. (the "Placement Agents") acted as the placement agents for the offering, pursuant to a Placement Agency Agreement, dated March 21, 2024 (the "Placement Agreement"). Pursuant to the Placement Agreement, the Company paid the Placement Agents a cash placement fee equal to 6.0% of the aggregate gross proceeds raised in the Registered Direct Offering.

The Company received aggregate net proceeds from the Registered Direct Offering of $21.9 million, net of the Placement Agents' fees of $1.4 million and other offering costs of $0.7 million.

Common Warrants and pre-funded warrants were determined to be equity-classified and proceeds received from their issuance were recorded as a component of stockholders' equity within additional paid-in capital. The Company determined that the warrants should be equity classified because they are freestanding financial instruments, do not embody an obligation for the Company to repurchase its shares, do not contain exercise contingencies tied to observable markets or indices, permit the holders to receive a fixed number of shares of common stock upon exercise in exchange for a fixed amount of consideration, subject only to adjustments that are inputs to the fair value of a fixed price/fixed consideration-option, and meet the equity classification criteria. The pre-funded warrants were exercised in full on April 8, 2024 and the Company issued an aggregate of 3,809,523

shares of common stock at an exercise price of $0.01. The Common Warrants had not been exercised and remained outstanding as of September 30, 2024.

NOTE 10—RESTRUCTURING CHARGES

April 2023 Restructuring

On April 26, 2023, the Company executed a restructuring of operations and a corresponding reduction in workforce (the "April 2023 Restructuring"), designed to reduce costs and increase focus on certain strategic priorities. The April 2023 Restructuring resulted in the elimination of approximately 110 roles in the United States, or approximately 23% of the total United States workforce. The April 2023 Restructuring resulted in the incurrence of one-time severance payments and other employee-related costs, including additional vesting of service-based stock compensation awards. The Company had estimated that it will incur $5.0 million in expenses related to employee severance and notice period payments, benefits and related restructuring charges for the April 2023 Restructuring. No expenses related to the April 2023 Restructuring were incurred during the three and nine months ended September 30, 2024. No expenses related to the April 2023 Restructuring were incurred during the three months ended September 30, 2023.The Company incurred approximately $5.0 million of expenses related to the April 2023 Restructuring during the nine months ended September 30, 2023, of which $3.8 million is included in research and development expense and $1.2 million is included in general and administrative expense in the accompanying Condensed Consolidated Statements of Operations. The April 2023 Restructuring and the cash payments related thereto are complete as of September 30, 2024.

November 2023 Restructuring

On November 1, 2023, the Company executed a restructuring of operations and a corresponding reduction in workforce (the "November 2023 Restructuring"), designed to reduce costs and advance its strategic transformation into a neurology-focused genomic medicine company. The November 2023 Restructuring resulted in the elimination of approximately 162 roles, including 108 full-time employees and 54 contracted employees and eliminated open positions, in the United States, or approximately 40% of the total United States workforce, and included one-time severance payments and other employee-related costs, including additional vesting of service-based stock compensation awards. The total restructuring expenses are estimated to be approximately $8.0 million to $9.0 million, related to employee severance and notice period payments, benefits, Brisbane facility close-out costs, and other related restructuring charges for the November 2023 Restructuring. The Company recorded $6.7 million of expenses relating to the November 2023 Restructuring in the fourth quarter of 2023. The expense adjustments recorded during the three and nine months ended September 30, 2024 were not material. The cash payments relating to employee severance and notice period payments, benefits, other employee-related costs for the November 2023 Restructuring are complete as of September 30, 2024. The Company expects the Brisbane facility close-out costs to be complete by second quarter of 2025, which were previously estimated to be complete by third quarter of 2024. The Company expects to incur estimated costs of $0.9 million to $1.9 million on Brisbane facility close-out costs through the second quarter of 2025.

France Restructuring

On March 1, 2024, the Company's Board of Directors approved the France Restructuring which will result in the elimination of all 93 roles in France, or approximately 24% of the total global workforce. As a result, the Company has terminated its research and development activities in France and is in the process of disposing of its France-based assets and settling the associated liabilities. The Company is also making severance payments as required by French law and the terms of the applicable collective bargaining agreements, and incurring other employee-related costs. The total restructuring expenses are estimated to be approximately $5.3 million to $5.6 million, related to employee severance and notice period payments, benefits, contract termination costs, and other related restructuring charges for the France Restructuring. The Company had recorded $4.7 million of expenses relating to the France restructuring in the fourth quarter of 2023. The expenses incurred during the three and nine months ended September 30, 2024 related to employee severance and notice period payments, benefits, other employee-related costs, and facility shutdown costs were not material. During the three months ended June 30, 2024, the Company recognized $2.4 million as expense relating to a manufacturing agreement for costs that will be incurred without economic benefit to the Company, included in general and administrative expense in the accompanying Condensed Consolidated Statements of Operations. During the three months ended September 30, 2024, the Company reached a settlement relating to the terminated manufacturing agreement and recognized $2.2 million as a reduction to general and administrative expenses in the accompanying Condensed Consolidated Statements of Operations. The Company expects to incur other additional estimated costs of $0.2 million to $0.5 million related to the France Restructuring through the fourth quarter of 2024. The Company expects the France Restructuring and its related cash payments to be substantially complete by the fourth quarter of 2024. See Note 6 – *Impairment and Write-Down of Assets Held For Sale* for impairment considerations related to the France Restructuring.

The following table is a summary of accrued April 2023 Restructuring, November 2023 Restructuring and France Restructuring charges included within other accrued liabilities on the Company's Condensed Consolidated Balance Sheet as of September 30, 2024 (in thousands):

	Nine Months Ended September 30, 2024
Balance at December 31, 2023	$ 11,733
Restructuring charges	603
Cash payments	(10,683)
Balance at September 30, 2024	$ 1,653

Sangamo may also incur other cash expenses or charges not currently contemplated or estimable due to events that may occur as a result of, or associated with, the November 2023 Restructuring and France Restructuring.

NOTE 11—SUBSEQUENT EVENTS

Transfer to Nasdaq Capital Markets and Compliance with Bid Price Requirement

Sangamo's common stock was transferred from Nasdaq Global Market to the Nasdaq Capital Market effective as of the opening of business on October 26, 2024 and has continued to trade under the symbol "SGMO." The Nasdaq Capital Market operates in substantially the same manner as the Nasdaq Global Select Market, and listed companies must meet certain financial requirements and comply with Nasdaq's corporate governance requirements.

As a result of the transfer, Sangamo was granted an additional 180-day grace period, or until April 21, 2025, or the Compliance Date, to regain compliance with the bid price requirement set forth in the continued listing requirements of Nasdaq Listing Rule 5450(a)(1) (the "Bid Price Requirement"). To regain compliance with the Bid Price Requirement and qualify for continued listing on the Nasdaq Capital Market, the minimum bid price per share of Sangamo's common stock must be at least $1.00 for at least ten consecutive business days during the additional 180-day compliance period. On November 5, 2024, Sangamo received a letter from the Listing Qualifications Staff of the Nasdaq Stock Market LLC that Sangamo has regained compliance with the Bid Price Requirement.

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 and Section 21E of the Exchange Act. These forward-looking statements include, without limitation, statements containing the words "anticipates," "believes," "continues," "could," "estimates," "expects," "intends," "may," "plans," "seeks," "should," "will," and other words of similar import or the negative of those terms or expressions. Such forward-looking statements are subject to known and unknown risks, uncertainties, estimates and other factors that may cause our actual results, performance or achievements, or industry results, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Actual results could differ materially from those set forth in such forward-looking statements as a result of, but not limited to, the "Risk Factors" described in Part I, Item 1A our Annual Report on Form 10-K for the year ended December 31, 2023 as filed with the Securities and Exchange Commission on March 13, 2024, or the 2023 Annual Report, as supplemented by the risks described under "Risk Factors" in Part II, Item 1A of this Quarterly Report on Form 10-Q. You should also read the following discussion and analysis in conjunction with our Condensed Consolidated Financial Statements and accompanying notes included in this Quarterly Report and the Consolidated Financial Statements and accompanying notes thereto included in our 2023 Annual Report.

Overview

We are a genomic medicine company committed to translating ground-breaking science into medicines that transform the lives of patients and families afflicted with serious neurological diseases. We believe our zinc finger epigenetic regulators are ideally suited to potentially address devastating neurology disorders and our capsid engineering platform has demonstrated the ability to expand delivery beyond currently available intrathecal delivery capsids, including in the central nervous system, or CNS, in preclinical studies.

Corporate Updates

Epigenetic Regulation and Capsid Delivery License Agreement with Genentech

On August 2, 2024, we entered into a global epigenetic regulation and capsid delivery license agreement, or the Genentech Agreement, with Genentech, Inc., a member of the Roche Group, or Genentech, to develop intravenously administered genomic medicines to treat certain neurodegenerative diseases. Under the Genentech Agreement, we granted an exclusive license to Genentech for our proprietary zinc finger repressors, or ZFRs, that are directed to tau and a second undisclosed neurology target. We also granted an exclusive license to Genentech to our proprietary, neurotropic adeno-associated virus capsid, STAC-BBB, for use with therapies directed to tau or to the second neurology target. Under the terms of the Genentech Agreement, we were responsible for completing a technology transfer and certain preclinical activities, and Genentech is solely responsible for all clinical development, regulatory interactions, manufacturing and global commercialization of resulting products.

Under the Genentech Agreement, we have received from Genentech a $40.0 million upfront license fee and a $10.0 million milestone payment, or the Genentech Payments. In addition, we are eligible to earn up to $1.9 billion in development and commercial milestones spread across multiple potential products under the Genentech Agreement and tiered mid-single digit to sub-teen double digit royalties on the net sales of such products, subject to certain specified reductions.

Financial Position – Going Concern

Based on our current operating plan, our cash and cash equivalents as of September 30, 2024, together with the $10.0 million milestone payment that we received from Genentech in October 2024, are expected to allow us to meet our liquidity requirements only into the first quarter of 2025. Our history of significant losses, negative cash flows from operations, limited liquidity resources currently on hand and dependence on our ability to obtain additional financing to fund our operations have resulted in management's assessment that there is substantial doubt about our ability to continue as a going concern for at least the next 12 months from the date the financial statements included in this Quarterly Report are issued. Our ability to continue to operate as a going concern is dependent upon our ability to raise substantial additional capital to fund our operations and support our research and development endeavors, including to progress our preclinical and clinical programs as described in our 2023 Annual Report and in this Quarterly Report. Although we received the Genentech Payments, and raised capital via a registered direct offering to institutional investors of common stock and accompanying warrants in March 2024, we will still need substantial additional capital in order to continue to operate as a going concern and fund our operations. We have been actively seeking, and continue to actively seek, substantial additional capital, including through additional strategic collaborations and other direct investments in our programs, public or private equity or debt financing, royalty financing and other sources. We may be unable to attract new investments as a result of the speculative nature of our newly reprioritized core neurology preclinical programs and additional capital may not be available on acceptable terms or at all. If adequate funds are not available to us on a timely basis, or at all, we will be required to take additional actions to address our liquidity needs, including additional cost

reduction measures such as further reducing operating expenses and delaying, reducing the scope of, discontinuing or altering our research and development activities, which would have a material adverse effect on our business and prospects, or we may be required to cease operations entirely, liquidate all or a portion of our assets, and/or seek protection under the U.S. Bankruptcy Code, and you may lose all or part of your investment. We have explored, and will continue to explore, whether filing for bankruptcy protection is in the best interest of our Company and our stakeholders.

Core Neurology Programs and Technologies

Our neurology pipeline is focused on two innovative areas aligned with our strategic transformation: (i) development of epigenetic regulation therapies treating serious neurological diseases and (ii) development of novel engineered adeno-associated virus, or AAV, capsids to deliver our therapies to the intended neurological targets. Indications for our wholly-owned neurology programs include idiopathic small fiber neuropathy, or iSFN, a type of chronic neuropathic pain, and prion disease.

Neurology Epigenetic Regulation Programs

- We have submitted an investigational new drug, or IND, application to the U.S. Food and Drug Administration, or FDA, for ST-503, an investigational epigenetic regulator for the treatment of intractable pain due to iSFN.
- Subject to clearance of this IND application by the FDA, we would expect to start the Phase 1/2 study of ST-503 in the middle of 2025, subject to our ability to secure adequate funding.
- In September 2024, we published a manuscript in bioRxiv titled, “Potent and selective repression of SCN9A by engineered ZFRs for the treatment of neuropathic pain,” demonstrating that ZFRs can selectively and potently reduce the expression of Nav1.7 sodium channels in sensory neurons, following a single intrathecal administration of ST-503, an AAV encoding a ZFR targeting the SCN9A gene.
- Clinical trial authorization, or CTA, enabling activities continue to advance for our epigenetic regulation program to treat prion disease, leveraging our novel proprietary neurotropic AAV capsid variant, known as STAC-BBB, which demonstrated industry-leading blood-brain barrier, or BBB, penetration in nonhuman primates, or NHPs, following intravenous administration.
- We presented updated data at the Prion 2024 Conference in October 2024, showing the potency of Sangamo’s ZFR in a disease mouse model at multiple dose levels. The ZFR significantly reduced expression of prion mRNA and protein in the brain, extended mouse survival and limited the formation of toxic prion aggregates. Additionally, we presented NHP data at the Prion 2024 Conference, showing that a single intravenous administration of the prion ZFR, delivered via STAC-BBB, resulted in potent and widespread repression of the prion gene in transduced neurons.
- A CTA submission for the prion program is expected in the fourth quarter of 2025, subject to our ability to secure adequate funding.

Novel AAV Capsid Delivery Technology

- We continue to engage in business development discussions with new potential collaborators for STAC-BBB for use in delivering intravenously administered genomic medicines to treat certain specified neurological diseases.

Clinical Programs

Fabry Disease

- In October 2024, we announced the outcome of a successful interaction with the FDA, providing a clear regulatory pathway to Accelerated Approval for isaralgagene civaparvovec, or ST-920, our investigational gene therapy for the treatment of Fabry disease.
- The FDA has agreed in a Type B interaction that data from the ongoing Phase 1/2 STAAR study can serve as the primary basis for approval under the Accelerated Approval Program, using estimated glomerular filtration rate, or eGFR, slope at 52 weeks across all patients as an intermediate clinical endpoint.
- We engaged with the FDA on alternative pathways to potential approval following analysis of clinical data from the Phase 1/2 STAAR study showing encouraging safety and efficacy data, including promising preliminary evidence of improved kidney function. In the 18 male and female patients treated with isaralgagene civaparvovec with more than one year of follow-up data, a statistically significant positive mean annualized eGFR slope was observed.
- Based on these latest data, the FDA agreed that eGFR slope at 52 weeks can serve as an intermediate clinical endpoint to support a potential Accelerated Approval. The FDA also advised that eGFR slope at 104 weeks may be assessed to verify clinical benefit.

- The complete dataset to support an Accelerated Approval pathway will be available in the first half of 2025. This approach enables a potential Biologics License Application, or BLA, submission in the second half of 2025, three years ahead of previous estimates, and avoids the requirement for an additional, costly registrational study to establish clinical efficacy.
- Dosing was completed in the Phase 1/2 STAAR study in April 2024, with 33 patients dosed in the study. The longest treated patient recently achieved four years of follow-up.
- In September 2024, the 18th and final patient who started the study on enzyme replacement therapy, or ERT, was withdrawn from ERT. All 18 patients remain off ERT as of November 12, 2024.
- We have begun to execute BLA readiness activities for isaralgagene civaparvovec, while continuing to advance ongoing business development discussions with potential collaboration partners.

Partnered Program

Hemophilia A

- Pfizer plans to present detailed data from the Phase 3 AFFINE trial of giroctocogene fitelparvovec, an investigational gene therapy that we have co-developed with and licensed to Pfizer for the treatment of adults with moderately severe to severe hemophilia A, in an oral presentation at the 66th American Society for Hematology Annual Meeting and Exposition on December 9, 2024 and in a poster presentation. Summaries of the accepted abstracts are more fully described below.
- Pfizer is discussing these data with regulatory authorities.
- We are eligible to earn from Pfizer up to $220.0 million in potential milestone payments upon the achievement of certain regulatory and commercial milestones for giroctocogene fitelparvovec and product sales royalties of 14% - 20% if giroctocogene fitelparvovec is approved and commercialized, subject to reductions due to patent expiration, entry of biosimilar products to the market and payment made under certain licenses for third-party intellectual property.

Summary of Results from the Hemophilia A Cohort of the Non-Investigational Lead-in Study: Prospective Collection of Bleeding Rate in Participants with Hemophilia A Prior to Phase 3 Study (AFFINE) of Giroctocogene Fitelparvovec

- Giroctocogene fitelparvovec (PF-07055480) is a liver-directed recombinant adeno-associated virus serotype 6, or AAV6, gene therapy vector encoding a B-domain-deleted variant of human factor VIII, or FVIII, that enables sustained endogenous FVIII expression.
- AFFINE (NCT04370054) is an ongoing, pivotal phase 3 trial to evaluate the efficacy and safety of giroctocogene fitelparvovec in individuals with hemophilia A.
- The primary endpoint of the AFFINE trial is to demonstrate non-inferiority in total (treated and untreated) annualized bleeding rate, or ABR, compared with routine prophylactic FVIII replacement therapy collected prospectively in a separate lead-in trial.
- The lead-in trial was initiated to establish prospective bleeding and infusion rates while on FVIII prophylaxis replacement therapy in the usual care setting of participants with hemophilia A.
- The baseline data obtained in this trial will be used for comparison with data collected post gene therapy for those participants who subsequently enrolled in the giroctocogene fitelparvovec phase 3 AFFINE trial.
- This study (NCT03587116) is a prospective, noninterventional, phase 3 lead-in trial that enrolled adult men ≥18 to <65 years old with moderately severe to severe hemophilia A (FVIII ≤1%) on stable prophylaxis FVIII replacement therapy who tested negative for neutralizing antibodies, or nAb, to AAV6. The trial is multi-regional in 18 countries in North America, South America, Asia Pacific, Europe, and the Middle East.
- Participants were instructed to record infusions and bleeding events in an electronic diary, with most participants providing ≥6 months of data prior to entry in the phase 3 AFFINE trial.
- Selected safety data (serious adverse events, or SAEs, and medically important events of FVIII inhibitor, thrombotic events, and factor hypersensitivity reactions) of FVIII replacement therapy were also collected.
- In all, 241 patients with hemophilia A were screened and 101 were enrolled in the hemophilia A cohort of this lead-in trial. The most common reason for screen failure was nAb positivity at screening in 115 (82.1%) of the 140 screen failures. The mean (range) age of those enrolled was 31.8 (18 to 64) years. Most participants were 18-44 years of age (84

[83.2%]), White (78 [77.2%]), and not Hispanic or Latino (76 [75.2%]). Target joints were identified in 47 (46.5%) participants.

- Overall, 84 (83.2%) participants had ≥180 days of follow-up; the mean (SD) follow-up duration of these participants was 351.3 (197.32) days and 23 (22.8%) had ≥1 year of follow-up. Overall, 17 (16.8%) participants had <180 days of follow-up; the mean (SD) follow-up duration of these participants was 84.8 (43.64) days. The overall mean (SD) follow-up duration was 306.5 (206.55) days.
- The mean (SD) total ABR was 6.1 (10.6), mean (SD) treated ABR was 4.87 (7.2), and mean (SD) annualized infusion rate, or AIR, was 127.1 (51.8). The mean (SD) annualized total FVIII replacement therapy consumption was 304,998 (153,932) IU.
- Of the 101 participants, four (4.0%) experienced four SAEs (hemorrhoidal hemorrhage, upper gastrointestinal hemorrhage, wound infection, and B-cell lymphoma; n=1 [1.0%] each); all SAEs were severe except upper gastrointestinal hemorrhage, which was moderate in severity. No adverse events of special interest were reported, and no safety signals were identified for FVIII replacement therapy.
- The ABR and AIR collected in this lead-in trial are representative of FVIII prophylaxis in hemophilia A populations.
- Although FVIII prophylaxis was well tolerated, with no emerging safety signals, a total ABR of 6.1 illustrates the limitations of current standard of care prophylaxis.
- The total ABR reported in a subset of participants who went on to enroll in the phase 3 AFFINE trial of giroctocogene fitelparvovec will be used as the comparator for the primary endpoint evaluating noninferiority post gene therapy, in accordance with the AFFINE trial protocol.

Summary of Primary Analysis Results from Phase 3 AFFINE Trial

- Giroctocogene fitelparvovec (PF-07055480), a hepatocyte-directed recombinant AAV serotype 6 vector encoding a B-domain–deleted variant of human FVIII, is a single-dose gene therapy aimed at enabling sustained endogenous FVIII expression in individuals with hemophilia A, or HA.
- AFFINE (NCT04370054) is a phase 3, open-label, single-arm trial that enrolled adult men with HA (FVIII:C ≤1%) who had completed a lead-in study while on exogenous FVIII prophylaxis therapy prior to administration of a single infusion of 3e13 vg/kg giroctocogene fitelparvovec.
- Primary and secondary endpoints were assessed in the efficacy population corresponding to participants with ≥15 months follow-up post-infusion and at least six months follow-up in the lead-in study (n=50).
- The primary endpoint was ABR for total (treated and untreated) bleeds from Week 12 (onset of clinically meaningful transgene-derived FVIII levels) through ≥15 months post-infusion compared to the pre-infusion prophylaxis period.
- Key secondary endpoints were the percentage of participants with FVIII activity >5%, as assessed via chromogenic assay, at 15 months and ABR for treated bleeds. AIR of exogenous FVIII replacement from Week 12 to ≥15 months post-infusion was a secondary endpoint. Additional secondary endpoints, including the incidence and severity of adverse events, or AEs, were assessed for all dosed participants (n=75).
- As of June 2024, 75 participants (median age, 30 [range 19–59] years) were dosed with giroctocogene fitelparvovec (median duration of follow-up, 16.8 [range 7.8–44.4] months). Of those 75 participants, 50 were included in the efficacy population (median duration of follow-up, 33.6 [range 14.5–44.4] months).
- Within this efficacy population, the study met its primary endpoint with a statistically significant decrease (non-inferiority and superiority; one-sided p-value=0.004) in total ABR from Week 12 through ≥15 months post-infusion compared to pre-infusion prophylaxis (mean total ABR, 1.2 vs 4.7; treatment difference, -3.49 [95% CI: -6.06, -0.91]). At Month 15, 84% of participants (95% CI: 70.9%, 92.8%; one-sided p-value=0.0086 vs null hypothesis of ≤68%) had FVIII activity >5%. Participants continued to maintain FVIII activity >5%, with 82.8% of participants [n=29] continuing to maintain FVIII activity >5% at 2-years post-infusion and 63% of participants [n=8] at 3-years post-infusion respectively. Treated ABR during Week 12 through ≥15 months post-infusion was significantly reduced compared to prophylaxis (mean treated ABR, 0.07 vs 4.1; treatment difference, -4.01 [95% CI: -5.57, -2.45; one-sided p-value<0.0001]), also demonstrating superiority. During the same period, 64% of participants had no bleeds, and 88% of participants had no treated bleeds. AIR post-infusion was reduced by 99.8% compared to the pre-infusion period (mean AIR, 0.2 vs 124.4).
- As of the June 2024 cutoff date, one (1.3%) dosed participant had resumed prophylaxis (at 16.1 months post-infusion). A total of 624 AEs, mostly mild or moderate, were reported in 74 (98.7%) participants. There were 26 serious AEs, or

SAEs, in 15 (20%) participants, with pyrexia most common (5 [6.7%] participants). The most common treatment-related AEs were pyrexia (54.7% of participants), alanine aminotransferase, or ALT, increased (46.7%), and headache (38.7%). There have been no study discontinuations.

- Post-infusion, 62.7% of participants received at least one dose of corticosteroids due to ALT elevations or decreases in FVIII activity (median time to initiation, 84 [range 7–193] days; mean total time on corticosteroids, 114.6 [11–296] days). AEs related to corticosteroids were reported in 19 (25.3%) participants.
- Transient FVIII activity >150% (defined as ≥1 central chromogenic assay measurement >150%) was reached in 37 (49.3%) participants, with 23 (30.7%) treated with prophylactic direct oral anticoagulants based on protocol and investigator's recommendation, which was well tolerated.
- Giroctocogene fitelparvovec yielded endogenous FVIII expression in the mild to normal range in most participants, resulting in superior bleed protection versus routine FVIII prophylaxis and significant reductions in bleeding. A single infusion was well tolerated and demonstrated durable efficacy on all primary and key secondary endpoints.

Collaborations

Our 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, or ZF, technology platform. They leverage our collaborators' therapeutic and clinical expertise and commercial resources with the goal of bringing our medicines more rapidly to patients. We believe these collaborations will potentially expand the addressable markets of our product candidates. To date, we have received approximately $867.0 million in upfront licensing fees, milestone payments and proceeds from sale of our common stock to collaborators and have the opportunity to earn up to $3.8 billion in potential future milestone payments from our ongoing collaborations, in addition to potential product royalties.

Manufacturing & Process Development

Following restructuring of our operations initiated in 2023, we expect to be substantially reliant on external partners to manufacture clinical supply for our neurology portfolio. We are retaining our in-house analytical and process development capabilities.

Macroeconomic Conditions

Our business and operations and those of our collaborators may be affected by financial instability and declining economic conditions in the United States and other countries caused by political instability and conflict, including the ongoing conflict between Russia and Ukraine and conflicts in the Middle East, or by general health crises, which have in the past led to market disruptions, including significant volatility in commodity prices, credit and capital markets instability, including disruptions in access to bank deposits and lending commitments, supply chain interruptions, rising interest rates and global inflationary pressures. These macroeconomic factors could materially and adversely affect our ability to continue to operate as a going concern and could otherwise have a material adverse effect on our business, operations, operating results and financial condition as well as the price of our common stock. In particular, our ability to raise the substantial additional capital we need in order to fund our business and to continue to operate as a going concern may be adversely impacted by these macroeconomic factors, and we cannot be certain that we will be able to obtain financing on terms acceptable to us, or at all.

Certain Components of Results of Operations

Our revenues have consisted primarily of revenues from collaboration agreements, which included upfront licensing fees, reimbursements for research services, and milestone achievements, and research grant funding. In 2023, our collaboration agreements with Biogen MA, Inc. and Biogen International GmbH, which we refer to together as Biogen, and Novartis Institutes for BioMedical Research, Inc., or Novartis, were terminated, and the collaboration agreement with Kite Pharma, Inc., a Gilead Sciences, Inc. subsidiary, or Kite, expired pursuant to its terms in April 2024. 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. For additional information concerning the terms of our ongoing collaboration agreements, see Note 5 – *Major Customers, Partnerships and Strategic Alliances* in the accompanying notes to the Condensed Consolidated Financial Statements included in Part I, Item 1 of this Quarterly Report on Form 10-Q.

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.

Although we expect research and development expenses to decrease in the near-term in connection with the restructuring of operations and reduction in workforce and significant reduction in our internal manufacturing and allogeneic research

footprints in California announced in April 2023, or the April 2023 Restructuring, the further restructuring of operations and corresponding reduction in workforce announced in November 2023, or the November 2023 Restructuring, and the wind-down of operations in France and corresponding reduction in workforce, including closure of our cell therapy manufacturing facility and research labs in Valbonne, France, or the France Restructuring, 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.

General and administrative expenses consist primarily of salaries and personnel related expenses for executive, finance and administrative personnel, stock-based compensation expense, professional fees, allocated facilities and information technology expenses, patent prosecution expenses and other general corporate expenses. Although we expect general and administrative expenses to decrease in the near-term in connection with the April 2023 Restructuring, November 2023 Restructuring and France Restructuring, we expect the growth of our business to require increased general and administrative expenses as we continue to advance our product candidates into and through the clinic.

Critical Accounting Policies and Estimates

Our Condensed Consolidated Financial Statements and the related disclosures 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 the following policies to be the most critical to an understanding of our financial condition and results of operations because they require us to make estimates, assumptions and judgments about matters that are inherently uncertain.

We believe our critical accounting policies and estimates relating to valuation of long-lived assets are the most significant estimates and assumptions used in the preparation of our Condensed Consolidated Financial Statements. See Note 1 – *Organization, Basis of Presentation and Summary of Significant Accounting Policies* in the accompanying notes to the Condensed Consolidated Financial Statements included in Part I, Item 1 of this Quarterly Report on Form 10-Q.

There have been no significant changes in our critical accounting policies and estimates during the three and nine months ended September 30, 2024, 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 Part II, Item 7 of the 2023 Annual Report.

Results of Operations for the Three and Nine Months Ended September 30, 2024 and 2023

Revenues

	Three Months Ended September 30, (in thousands, except percentage values)				Nine Months Ended September 30, (in thousands, except percentage values)			
	2024	2023	Change	%	2024	2023	Change	%
Revenues	$ 49,412	$ 9,398	$ 40,014	425.8%	$ 50,249	$ 174,190	$ (123,941)	(71%)

Revenues during the three and nine months ended September 30, 2024 primarily consisted of revenues from the collaboration agreement with Genentech and royalties from our license agreements with Sigma-Aldrich Corporation, or Sigma, and Open Monoclonal Technology, Inc. (now Ligand Pharmaceuticals Inc.), or Ligand. We anticipate revenues in the future will be derived primarily from our license agreements. The terminations of our collaboration agreements with Biogen and Novartis became effective in June 2023, following which we are not entitled to any further milestone payments or royalties from either Biogen or Novartis, nor does either Biogen or Novartis have any further obligations to develop or to reimburse us the costs of any of the programs previously subject to the Biogen and Novartis collaborations. Further, our collaboration agreement with Kite expired pursuant to its terms in April 2024.

The increase of $40.0 million in revenues for the three months ended September 30, 2024, compared to the same period in 2023, was primarily attributed to $49.2 million in revenue relating to our collaboration agreement with Genentech. This increase was offset by a decrease of $5.5 million in revenue relating to our collaboration agreement with Kite which expired pursuant to its terms in April 2024, a decrease of $2.2 million in revenue relating to our research evaluation and option agreement with Prevail Therapeutics, and a decrease of $1.5 million in revenue relating to our other license agreements.

The decrease of $123.9 million in revenues for the nine months ended September 30, 2024, compared to the same period in 2023, was primarily attributed to decreases of $134.8 million and $12.2 million in revenues relating to our collaboration agreements with Biogen and Novartis, respectively, due to the termination of collaboration agreements in June 2023, a decrease of $19.0 million in revenue relating to our collaboration agreement with Kite which expired pursuant to its terms in April 2024, a

decrease of $4.3 million in revenue relating to our license agreements with Sigma and Ligand, and a decrease of $2.8 million in revenue relating to our other license agreements. These decreases were offset by $49.2 million in revenue relating to our collaboration agreement with Genentech.

Operating expenses

	Three Months Ended September 30, (in thousands, except percentage values)				Nine Months Ended September 30, (in thousands, except percentage values)			
	2024	2023	Change	%	2024	2023	Change	%
Operating expenses:								
Research and development	$ 27,732	$ 57,089	$ (29,357)	(51%)	$ 87,846	$ 183,351	$ (95,505)	(52%)
General and administrative	11,049	13,918	(2,869)	(21%)	34,861	48,068	(13,207)	(27%)
Impairment of long-lived assets	—	44,799	(44,799)	(100%)	5,521	65,232	(59,711)	(92%)
Impairment of goodwill and indefinite-lived intangible assets	—	—	—	—	—	89,485	(89,485)	(100%)
Total operating expenses	$ 38,781	$ 115,806	$ (77,025)	(67%)	$ 128,228	$ 386,136	$ (257,908)	(67%)

Research and Development Expenses

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

The decrease of $29.4 million in research and development expenses for the three months ended September 30, 2024, compared to the same period in 2023, was primarily attributable to lower preclinical, clinical and manufacturing expenses of $14.7 million primarily related to the deferral and reprioritization of certain programs, lower compensation and other personnel costs of $5.6 million due to lower headcount as a result of restructurings of operations and corresponding reductions in workforce announced during 2023, lower allocated overhead costs of $4.9 million due to changes in the pool of allocable costs as a result of restructuring of operations, and lower facilities and infrastructure related expenses of $4.7 million, including depreciation. Stock-based compensation expense included in research and development expenses was $1.5 million and $3.2 million for the three months ended September 30, 2024 and 2023, respectively.

The decrease of $95.5 million in research and development expenses for the nine months ended September 30, 2024, compared to the same period in 2023, was primarily attributable to lower preclinical, clinical and manufacturing expenses of $39.6 million primarily related to the termination of collaboration agreements with Biogen and Novartis and deferral and reprioritization of certain programs, lower compensation and other personnel costs of $33.7 million due to lower headcount as a result of restructurings of operations and corresponding reductions in workforce announced during 2023 and restructuring expenses, lower allocated overhead costs of $11.5 million due to changes in the pool of allocable costs as a result of restructuring of operations, and lower facilities and infrastructure related expenses of $10.4 million, including depreciation. Stock-based compensation expense included in research and development expenses was $4.2 million and $12.0 million for the nine months ended September 30, 2024 and 2023, respectively.

We expect to continue to devote substantial resources to research and development in the future. While we anticipate that our research and development expenses will decrease in the near-term in connection with the April 2023 Restructuring, November 2023 Restructuring and France Restructuring and the related reprioritization of certain programs and deferral of certain new investments, we ultimately 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 preclinical product candidates into clinical trials and/or if we are successful in securing new collaborations or other capital necessary to advance our clinical programs.

The length of time required to complete our development programs and our development costs for those programs may be impacted by the results of preclinical testing, scope and timing of enrollment in clinical trials for our product candidates, our decisions to pursue development programs in other therapeutic areas, whether we pursue development of our product candidates with a partner or collaborator or independently and our ability to secure the necessary funding to progress the development of our programs. For example, our current focus is on our core neurology preclinical program, and we do not yet know whether and to what extent we will progress any resulting product candidates from our preclinical program into the clinic and in what therapeutic areas. We are actively seeking collaboration partners or a direct external investment, as applicable, to progress our Fabry disease program and STAC-BBB and modular integrase platforms. 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. 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 2023 Annual Report, as supplemented by the risks described under "Risk Factors" in Part II, Item 1A of this Quarterly Report on Form 10-Q.

General and Administrative Expenses

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

The decrease of $2.9 million in general and administrative expenses for the three months ended September 30, 2024, compared to the same period in 2023, was primarily attributable to lower external professional services expenses of $2.4 million, lower facilities and infrastructure related costs of $2.4 million, an adjustment of $2.2 million to expense relating to settlement of obligations under a manufacturing agreement, and lower compensation and other personnel costs of $0.7 million due to lower headcount as a result of the April 2023 Restructuring and November 2023 Restructuring. These decreases were partially offset by higher allocated overhead costs of $4.9 million due to changes in the pool of allocable costs as a result of restructuring of operations. Stock-based compensation expense included in general and administrative expenses was $1.8 million and $3.0 million for the three months ended September 30, 2024 and 2023, respectively.

The decrease of $13.2 million in general and administrative expenses for the nine months ended September 30, 2024, compared to the same period in 2023, was primarily attributable to lower compensation and other personnel costs of $9.8 million due to lower headcount as a result of restructurings of operations and corresponding reductions in workforce announced during 2023 and restructuring expenses, lower external professional services expenses of $6.3 million, lower facilities and infrastructure related costs of $5.6 million, and Biogen contract cost asset amortization of $2.6 million recorded in 2023 due to the termination of the collaboration agreement. These decreases were partially offset by higher allocated overhead costs of $11.5 million due to changes in the pool of allocable costs as a result of restructuring of operations. Stock-based compensation expense included in general and administrative expenses was $4.9 million and $9.3 million for the nine months ended September 30, 2024 and 2023, respectively.

While we anticipate that our general and administrative expenses will decrease modestly in the near-term in connection with the April 2023 Restructuring, November 2023 Restructuring and France Restructuring, we expect higher general and administrative expenses in the next several years if we are successful in advancing our clinical programs and if we are able to progress our preclinical product candidates into clinical trials and/or if we are successful in securing new collaborations or other capital.

Restructuring Charges

In 2023, we executed a series of restructurings of operations and corresponding reductions in workforce announced in April 2023 and November 2023. In 2024, we are executing a wind-down of our French operations and a corresponding workforce reduction announced in March 2024. These restructurings were designed to reduce overall costs and advance our strategic transformation into a neurology focused genomic medicine company focused on epigenetic regulation programs addressing serious neurological diseases and novel AAV capsid delivery technology. Restructuring charges associated with the April 2023 Restructuring are complete as of September 30, 2024. In connection with the November 2023 Restructuring and France Restructuring, the expenses incurred and adjustments recorded during the three and nine months ended September 30, 2024 related to employee severance and notice period payments, benefits, and other employee-related costs were not material.

For more information see Note 10 – *Restructuring Charges* in the accompanying notes to the Condensed Consolidated Financial Statements included in Part I, Item 1 of this Quarterly Report on Form 10-Q.

Impairment

During the three months ended September 30, 2024, there were no indicators of impairment for any of the Company's asset groups and no additional impairment was recorded. During the nine months ended September 30, 2024, we recognized impairment charges of $5.5 million. During the nine months ended September 30, 2024, our Board of Directors approved the France Restructuring, we initiated several actions aimed at reducing costs, including activities related to the closure of our facility in Brisbane, California, and we faced a sustained decline in our stock price and related market capitalization. There was also a decline in the market rates for facility subleases, indicating the carrying values of right of use and leasehold improvement assets could be impaired. As a result of these factors, we concluded certain long-lived assets, primarily comprising right-of-use assets, related leasehold improvements, and certain manufacturing and laboratory equipment, were impaired.

During the three and nine months ended September 30, 2023, we recognized impairment charges of $44.8 million and $154.7 million, respectively. During the nine months ended September 30, 2023, we experienced a sustained decline in our stock price and related market capitalization, deferral and reprioritization of certain research and development programs, and our collaboration agreements with Biogen and Novartis were terminated. As a result of these factors, we concluded our goodwill, indefinite-lived intangible asset, and long-lived assets, primarily comprising right-of-use assets, related leasehold improvements and construction-in-progress, and manufacturing and laboratory equipment, were impaired.

For more information see Note 6 – *Impairment and Write-Down of Assets Held For Sale* in the accompanying notes to the Condensed Consolidated Financial Statements included in Part I, Item 1 of this Quarterly Report on Form 10-Q.

Interest and other income, net

Interest and other income, net was $0.1 million and $3.5 million for the three months ended September 30, 2024 and 2023, respectively. The decrease of $3.4 million was primarily driven by a decrease of $1.0 million in interest income due to a decrease in marketable securities, a decrease of $1.8 million in research tax credits, and a decrease of $0.8 million related to fluctuations in foreign currency exchange rates.

Interest and other income, net was $3.7 million and $9.6 million for the nine months ended September 30, 2024 and 2023, respectively. The decrease of $5.9 million was primarily driven by a decrease of $4.6 million in interest income due to a decrease in marketable securities, and a decrease of $2.3 million in research tax credits, partially offset by $0.6 million from gain on sale of investments, and $0.3 million related to fluctuations in foreign currency exchange 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 September 30, 2024, we had cash and cash equivalents totaling $39.2 million, compared to cash, cash equivalents, and marketable securities of $81.0 million as of December 31, 2023. Our most significant use of capital during the year was for employee compensation and external research and development expenses, such as manufacturing, clinical trials and preclinical activity related to our therapeutic programs. 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℠, or the sales agreement, with Jefferies LLC, 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. In December 2022, we entered into an amendment to the Open Market Sale Agreement℠, which increased the aggregate offering price under the sales agreement by an additional $175.0 million. No shares were sold during the three and nine months ended September 30, 2024. Approximately $194.5 million remained available under the sales agreement as of September 30, 2024.

Under Accounting Standard Codification Topic 205-40, Presentation of Financial Statements—Going Concern, or ASC Topic 205-40, we have the responsibility to evaluate whether conditions and/or events raise substantial doubt about our ability to meet our future financial obligations as they become due within one year after the date that the Condensed Consolidated Financial Statements included in this Quarterly Report on Form 10-Q are issued. As required under ASC Topic 205-40, management's evaluation should initially not take into consideration the potential mitigating effects of management's plans that have not been fully implemented as of the date the Condensed Consolidated Financial Statements are issued. When substantial doubt exists, management evaluates whether the mitigating effects of its plans sufficiently alleviate the substantial doubt about the company's ability to continue as a going concern. The mitigating effects of management's plans, however, are only considered if both (i) it is probable that the plans will be effectively implemented within one year after the date that the financial statements are issued, and (ii) it is probable that the plans, when implemented, will mitigate the relevant conditions or events that raise substantial doubt

about the entity's ability to continue as a going concern within one year after the date that the financial statements are issued. Generally, to be considered probable of being effectively implemented, the plans must have been approved by the company's board of directors before the date that the financial statements are issued.

Based on our current operating plan, our cash and cash equivalents as of September 30, 2024, together with the $10.0 million milestone payment that we received from Genentech in October 2024, are expected to allow us to meet our liquidity requirements only into the first quarter of 2025. Our history of significant losses, negative cash flows from operations, limited liquidity resources currently on hand and dependence on our ability to obtain additional financing to fund our operations have resulted in management's assessment that there is substantial doubt about our ability to continue as a going concern for at least the next 12 months from the date the financial statements included in this Quarterly Report are issued. Our ability to continue to operate as a going concern is dependent upon our ability to raise substantial additional capital to fund our operations and support our research and development endeavors, including to progress our preclinical and clinical programs as described in our 2023 Annual Report and in this Quarterly Report. Although we received the Genentech Payments, and raised capital via a registered direct offering to institutional investors of common stock and accompanying warrants in March 2024, we will still need substantial additional capital in order to continue to operate as a going concern and fund our operations. We have been actively seeking, and continue to actively seek, substantial additional capital, including through public or private equity or debt financing, royalty financing or other sources, such as strategic collaborations and other direct investments in our programs. We may be unable to attract new investments as a result of the speculative nature of our newly reprioritized core neurology preclinical programs. Additional capital may not be available on acceptable terms or at all. If adequate funds are not available to us on a timely basis, or at all, we will be required to take additional actions to address our liquidity needs, including additional cost reduction measures such as further reducing operating expenses and delaying, reducing the scope of, discontinuing or altering our research and development activities, which would have a material adverse effect on our business and prospects, or we may be required to cease operations entirely, liquidate all or a portion of our assets, and/or seek protection under the U.S. Bankruptcy Code, and you may lose all or part of your investment. We have explored, and will continue to explore, whether filing for bankruptcy protection is in the best interest of our Company and our stakeholders.

While the April 2023 Restructuring was completed in the third quarter of 2024, and we expect the France Restructuring and November 2023 Restructuring to be complete by the fourth quarter of 2024 and second quarter of 2025, respectively, we may also incur other charges or cash expenditures not currently contemplated due to events that may occur as a result of, or associated with, each of the restructurings. In addition, we may not achieve the expected benefits of these cost reduction measures and other cost reduction plans on the anticipated timeline, or at all, or we may use our available capital more quickly than we expect, which could otherwise accelerate our liquidity needs and could force us to further curtail or suspend, or entirely cease, our operations.

Moreover, we rely in part on our collaboration partners to provide funding for and otherwise advance our preclinical and clinical programs. While we continue to advance ongoing business development discussions with potential collaboration partners regarding our Fabry disease program and our novel STAC-BBB capsid and our modular integrase platforms, we may not be successful in doing so in a timely manner, on acceptable terms or at all, and we may otherwise fail to raise sufficient additional capital to advance our programs, in which case, we may not receive the expected return on our investments in these programs, platforms and technologies. In any event, we need substantial additional funding in order to execute on our current operating plan. If we raise additional capital through public or private equity offerings, including sales pursuant to our at-the-market offering program with Jefferies LLC, the ownership interest of our existing stockholders will be diluted, and such dilution may be substantial given our current stock price decline, and the terms of any new equity securities may have a preference over, and include rights superior to, our common stock. If we raise additional capital through royalty financings or other collaborations, strategic alliances or licensing arrangements with third parties, we may need to relinquish certain valuable rights to our product candidates, technologies, future revenue streams or research programs or grant licenses on terms that may not be favorable. If we raise additional capital through debt financing, we may be subject to specified financial covenants or covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or pursuing certain transactions, any of which could restrict our ability to commercialize our product candidates or operate as a business.

In addition, as we focus our efforts on proprietary human therapeutics, we will need to seek regulatory approvals of our product candidates from the FDA or other comparable foreign regulatory authorities, a process that could cost in excess of hundreds of millions of dollars per product. We may experience difficulties in accessing the capital markets due to external factors beyond our control, such as volatility in the equity markets for emerging biotechnology companies and general economic and market conditions both in the United States and abroad. In particular, our ability to raise the substantial additional capital we need in order to fund our business may be adversely impacted by global economic conditions and disruptions to and volatility in the credit and financial markets in the United States and worldwide, such as has been experienced recently due in part to, among other things, the ongoing conflict between Russia and Ukraine and conflicts in the Middle East. We cannot be certain that we will be able to obtain financing on terms acceptable to us, or at all.

Cash Flows

Operating activities

Net cash used in operating activities was $63.8 million for the nine months ended September 30, 2024, primarily due to:

- a net loss of $74.5 million, adjusted for non-cash long-lived asset impairment charges of $5.5 million, other non-cash expenses related to stock-based compensation of $9.1 million, depreciation and amortization of $3.9 million, and amortization of operating lease right-of-use assets of $3.4 million, offset partially by accretion of discounts and impairment of marketable securities of $0.3 million; and
- an increase in accounts receivable by $9.6 million, a decrease in accounts payable and other accrued liabilities by $6.9 million, and a decrease in lease liabilities by $4.1 million. These were partially offset by a decrease in prepaid expenses and other assets by $6.4 million, an increase in accrued compensation and employee benefits by $2.1 million, an increase in deferred revenue by $0.8 million, and a decrease in interest receivable by $0.4 million.

Net cash used in operating activities was $174.3 million for the nine months ended September 30, 2023, primarily due to:

- a net loss of $197.5 million, adjusted for non-cash goodwill, indefinite-lived intangible assets, and long-lived asset impairment charges of $154.7 million, other non-cash expenses related to stock-based compensation of $21.3 million, depreciation and amortization of $13.2 million, and amortization of operating lease right-of-use assets of $5.9 million, offset by income tax benefit of $6.2 million related to reversal of the deferred tax liability as a result of impairment on the associated indefinite-lived intangible assets, accretion of discounts and impairment of marketable securities of $2.0 million, and other non-cash adjustments of $1.1 million; and
- a decrease in deferred revenues of $159.7 million, mainly attributed to the impact of the termination and related contract modification of our collaboration agreement with Biogen and a change in estimate for our collaboration agreement with Kite, a decrease in accounts payable and other accrued liabilities by $5.2 million, a decrease in accrued compensation and employee benefits by $4.2 million, and a decrease in lease liabilities by $3.7 million. These were partially offset by decrease in prepaid expenses and other assets by $5.2 million, and a decrease in accounts receivable by $2.5 million.

Investing activities

Net cash provided by investing activities was $36.2 million for the nine months ended September 30, 2024, related to sales of marketable securities of $34.7 million, maturities of marketable securities of $1.1 million, and sales of assets classified as held for sale of $0.5 million.

Net cash provided by investing activities was $115.8 million for the nine months ended September 30, 2023, related to maturities of marketable securities of $193.9 million, partially offset by purchases of marketable securities of $59.6 million, and purchases of property and equipment of $18.5 million.

Financing activities

Net cash provided by financing activities was $21.4 million for the nine months ended September 30, 2024, related to $21.9 million of proceeds from issuance of common stock, net of offering expenses of $2.1 million, and proceeds from issuance of common stock under employee stock purchase plan of $0.1 million, partially offset by taxes paid related to net share settlement of equity awards of $0.7 million.

Net cash provided by financing activities was $14.4 million for the nine months ended September 30, 2023, related to $15.1 million of proceeds from the at-the-market offering, net of offering expenses of $0.4 million, and proceeds from purchases of common stock under the employee stock purchase plan of $0.7 million, partially offset by taxes paid related to net share settlement of equity awards of $1.4 million.

Operating Capital and Capital Expenditure Requirements

We anticipate continuing to incur operating losses for at least the next several years and need to raise substantial additional capital. The effects of the current macroeconomic environment, including the effects of war in Ukraine and conflicts in the Middle East, inflation, climate change, rising interest rates and other economic uncertainty and volatility, has resulted and may continue to result in significant disruption of global financial markets, which could impair our ability to access capital on terms that are acceptable or at all, and in turn could negatively affect our liquidity and our ability to continue to operate as a going concern. Future capital requirements beyond the first quarter of 2025, the period into which we expect our existing cash and cash equivalents, including the Genentech Payments, will be sufficient to fund our planned operations, will be substantial, and we need to raise substantial additional capital to continue to operate as a going concern and to fund the development, manufacturing and

potential commercialization of our product candidates (see "*–Financial Position–Going Concern*" and "*–Liquidity and Capital Resources–Liquidity*" above).

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

- the results of preclinical testing of our early-stage core neurology program product candidates;
- 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.

Contractual Obligations

Our future minimum contractual obligations as of December 31, 2023 were reported in the 2023 Annual Report. During the nine months ended September 30, 2024, there have been no material changes outside the ordinary course of our business from the contractual obligations previously disclosed in our 2023 Annual Report.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Not applicable.

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 September 30, 2024. Based on that evaluation, as of September 30, 2024, 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 quarter ended September 30, 2024 that have materially affected, or are 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

Below we are providing, in supplemental form, changes to our risk factors from those previously disclosed in Part I, Item 1A of the 2023 Annual Report. Our risk factors disclosed in Part I, Item 1A of the 2023 Annual Report provide additional discussion about these supplemental risks and we encourage you to read and carefully consider the risk factors disclosed in Part I, Item 1A of the 2023 Annual Report for a more complete understanding of the risks and uncertainties material to our business.

We have historically incurred significant operating losses since inception and anticipate that we will incur continued losses for the foreseeable future.

We have a history of recurring net losses, including $74.5 million for the nine months ended September 30, 2024 and $257.8 million and $192.3 million for the years ended December 31, 2023 and 2022, respectively, and we have otherwise generated operating losses since we began operations in 1995. The extent of our future losses and the timing of profitability are uncertain, and we expect to incur losses for the foreseeable future. We have been engaged in developing our zinc finger, or ZF, technology since inception, which has and will continue to require significant research and development expenditures. To date, we have generated our funding from issuance of equity securities, revenues derived from collaboration agreements, other strategic partnerships in non-therapeutic applications of our technology, federal government research grants and grants awarded by research foundations. We expect to continue to incur additional operating losses for the next several years as we continue to develop our preclinical core neurology therapeutic programs and capsid engineering platform. If the time required to generate significant product revenues and achieve profitability is longer than we currently anticipate or if we are unable to generate liquidity through equity financing or other sources of funding, we may be forced to further curtail or suspend, or entirely cease, our operations.

There is substantial doubt about our ability to continue to operate as a going concern. We need substantial additional funding to execute our operating plan and to continue to operate as a going concern. If adequate funds are not available to us on a timely basis, or at all, we will be required to take additional actions to address our liquidity needs, including additional cost reduction measures such as further reducing operating expenses and delaying, reducing the scope of, discontinuing or altering our research and development activities, which would have a material adverse effect on our business and prospects, or we may be required to cease operations entirely, liquidate all or a portion of our assets, and/or seek protection under the U.S. Bankruptcy Code, and you may lose all or part of your investment. Future sales and issuances of equity securities would also result in substantial dilution to our stockholders.

We have incurred significant operating losses and negative operating cash flows since inception and have not achieved profitability. Based on our current operating plan, our cash and cash equivalents as of September 30, 2024, including the $40.0 million in upfront license fee, together with the $10.0 million milestone payment that we received from Genentech in October 2024, or the Genentech Payments, will be sufficient to fund our planned operations only into the first quarter of 2025. Our financial position raises substantial doubt about our ability to continue to operate as a going concern. Our ability to continue to operate as a going concern is dependent upon our ability to raise substantial additional capital to fund our operations and support our research and development endeavors, including to progress our preclinical and clinical programs as described in our 2023 Annual Report and in this Quarterly Report. In this regard, we have been seeking, and continue to actively seek substantial additional capital, including through public or private equity or debt financing, royalty financing or other sources, such as strategic collaborations and other direct investments in our programs. Although we received the Genentech Payments, and raised capital via a registered direct offering to institutional investors of common stock and accompanying warrants in March 2024, or the 2024 Registered Direct Offering, for net proceeds of approximately $21.8 million after deducting placement agents' fees and estimated offering expenses payable by us, we will still need substantial additional capital in order to continue to operate as a going concern and fund our operations. Additional capital may not be available on acceptable terms or at all. In particular, the perception of our ability to continue to operate as a going concern may make it more difficult to obtain financing for the continuation of our operations, particularly in light of currently challenging macroeconomic and market conditions. Further, we may be unable to attract new investments as a result of the speculative nature of our newly reprioritized core neurology preclinical programs. If adequate funds are not available to us on a timely basis, or at all, we will be required to take additional actions to address our liquidity needs, including additional cost reduction measures such as further reducing operating expenses and delaying, reducing the scope of, discontinuing or altering our research and development activities, which would have a material adverse effect on our business and prospects, or we may be required to cease operations entirely, liquidate all or a portion of our assets, and/or seek protection under the U.S. Bankruptcy Code, and you may lose all or part of your investment. We have

explored, and will continue to explore, whether filing for bankruptcy protection is in the best interest of our Company and our stakeholders.

In April 2023, we announced a restructuring of operations and a reduction in force and a significant reduction in our internal manufacturing and allogeneic research footprints in California, or the April 2023 Restructuring, and in November 2023, we announced a further restructuring of operations and reduction in force, or the November 2023 Restructuring, including a strategic transformation to focus resources on our proprietary neurology-focused epigenetic regulation programs and AAV capsid delivery technology and move all U.S. operations, including our headquarters, to our Richmond, California facility. On March 1, 2024, our board of directors approved the wind-down of our operations in France and closure of our facility in Valbonne, France by the end of 2024, or the France Restructuring. While the April 2023 Restructuring was completed in the third quarter of 2024, and we expect the France Restructuring and November 2023 Restructuring to be complete by the fourth quarter of 2024 and second quarter of 2025, respectively, we may also incur other charges or cash expenditures not currently contemplated due to events that may occur as a result of, or associated with, each of the restructurings. In addition, we may not achieve the expected benefits of these cost reduction measures and other cost reduction plans on the anticipated timeline, or at all, or we may use our available capital more quickly than we expect, which could otherwise accelerate our liquidity needs and could force us to further curtail or suspend, or entirely cease, our operations. Moreover, we have historically relied in part on collaboration partners to provide funding for and otherwise advance our preclinical and clinical programs. However, in June 2023, our collaboration agreements with Biogen and Novartis terminated, and our collaboration agreement with Kite expired pursuant to its terms in April 2024. Further, while we may identify new collaboration partners who can progress some of the programs that were the subject of these collaborations as well as our Fabry disease program and STAC-BBB and modular integrase platforms, we have not yet been, and may never be, successful in doing so in a timely manner, on acceptable terms or at all, and we may otherwise fail to raise sufficient additional capital in order to progress these and our other programs ourselves, in which case, we will not receive any return on our investments in these programs. Although we have entered into the Genentech Agreement pursuant to which we are eligible to earn future development and commercial milestone payments, and have received the Genentech Payments, we may never receive any further payments thereunder. In any event, we need substantial additional funding in order to advance our core neurology programs as well as our Fabry disease program, capsid engineering efforts and modular integrase platform, and to otherwise execute on our current operating plan.

If we raise additional capital through public or private equity offerings, including sales pursuant to our at-the-market offering program with Jefferies LLC, the ownership interest of our existing stockholders will be diluted, and such dilution may be substantial given our current stock price decline. For example, in the 2024 Registered Direct Offering, we issued 24,761,905 shares of common stock, pre-funded warrants to purchase 3,809,523 shares of common stock and accompanying warrants to purchase an aggregate of 28,571,428 shares of common stock at a price per share of common stock (or pre-funded warrant in lieu thereof) and accompanying warrant of $0.84 per share. In addition, the terms of any new equity securities we may issue may have a preference over, and include rights superior to, our common stock. If we raise additional capital through royalty financings or other collaborations, strategic alliances or licensing arrangements with third parties, we may need to relinquish certain valuable rights to our product candidates, technologies, future revenue streams or research programs or grant licenses on terms that may not be favorable. If we raise additional capital through debt financing, we may be subject to specified financial covenants or covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or pursuing certain transactions, any of which could restrict our ability to commercialize our product candidates or operate as a business.

In addition, as we focus our efforts on proprietary human therapeutics, we will need to seek regulatory approvals of our product candidates from the FDA or other comparable foreign regulatory authorities, a process that could cost in excess of hundreds of millions of dollars per product. We may experience difficulties in accessing the capital markets due to external factors beyond our control, such as volatility in the equity markets for emerging biotechnology companies and general economic and market conditions both in the United States and abroad. In particular, our ability to raise the substantial additional capital we need in order to fund our business may be adversely impacted by global economic conditions and disruptions to and volatility in the credit and financial markets in the United States and worldwide, such as has been experienced recently. We cannot be certain that we will be able to obtain financing on terms acceptable to us, or at all. Our failure to obtain adequate and timely funding will adversely affect our ability to continue to operate as a going concern and our ability to develop our technology and products candidates.

If we seek to reorganize under the U.S. Bankruptcy Code, our future operations are uncertain, and such reorganization could be unsuccessful and/or result in no recovery for holders of our common stock. If we are unable to successfully reorganize, we may be forced to pursue a liquidation of some or all of our assets.

Based on our current operating plan, our cash and cash equivalents as of September 30, 2024, together with the $10.0 million milestone payment that we received from Genentech in October 2024, are expected to allow us to meet our liquidity requirements only into the first quarter of 2025. We continue to actively seek substantial additional capital, including through public or private equity or debt financing, royalty financing or other sources, such as strategic collaborations and other direct

investments in our programs. We have explored, and will continue to explore, whether filing for bankruptcy protection is in the best interest of our Company and our stakeholders. In the event we file for relief under the U.S. Bankruptcy Code, our operations, our ability to develop our product candidates and execute on our operating plan, and our ability to continue as a going concern will be subject to the risks and uncertainties associated with bankruptcy proceedings, including, among others: our ability to execute, confirm and consummate a plan of reorganization; the additional, significant costs of bankruptcy proceedings and related fees; our ability to obtain sufficient financing to allow us to emerge from bankruptcy and execute our business plan thereafter, and our ability to comply with terms and conditions of any such financing; our ability to continue our operations in the ordinary course; our ability to maintain our relationships with our collaborators, counterparties, employees and other third parties; our ability to obtain, maintain or renew contracts that are critical to our operations on reasonably acceptable terms and conditions or at all; our ability to attract, motivate and retain key employees; the ability of third parties to use certain provisions of the U.S. Bankruptcy Code to terminate contracts without first seeking Bankruptcy Court approval; the ability of third parties to seek and obtain court approval to terminate or shorten the exclusivity period for us to propose and confirm a plan of reorganization, to appoint a trustee, or to convert a proceeding under Chapter 11 of the U.S. Bankruptcy Code to a proceeding under Chapter 7 of the U.S. Bankruptcy Code; and the actions and decisions of our stakeholders and other third parties who have interests in our bankruptcy proceedings that may be inconsistent with our operational and strategic plans. Any delays in our bankruptcy proceedings would increase the risks that we may not be able to reorganize our business and emerge from bankruptcy proceedings and may increase our costs associated with the bankruptcy process or result in prolonged operational disruption. In addition, we would need the prior approval of the Bankruptcy Court for transactions outside the ordinary course of business during the course of any bankruptcy proceedings, which may limit our ability to respond timely to certain events or take advantage of certain opportunities. Because of the risks and uncertainties associated with any bankruptcy proceedings, we cannot accurately predict or quantify the ultimate impact of events that could occur during any such proceedings. There can be no guarantees that if we seek protection under the U.S. Bankruptcy Code, we will emerge from any such proceedings as a going concern or that holders of our common stock will receive any recovery from any bankruptcy proceedings.

In the event we are unable to pursue protection under Chapter 11 of the U.S. Bankruptcy Code, or, if pursued, successfully emerge from such proceedings, it may be necessary for us to pursue protection under Chapter 7 of the U.S. Bankruptcy Code for all or a part of our businesses. In such event, a Chapter 7 trustee would be appointed or elected to liquidate our assets for distribution in accordance with the priorities established by the U.S. Bankruptcy Code. We believe that liquidation under Chapter 7 would result in significantly smaller distributions being made to our stakeholders than those we might obtain under Chapter 11, or no distribution at all, primarily because of the likelihood that the assets would have to be sold or otherwise disposed of in a distressed fashion over a short period of time rather than in a controlled manner and as a going concern. In such event, you may lose part or all of your investment.

Commercialization of our technologies will depend, in part, on collaborations with other companies. If we are not able to find collaborators in the future or if our collaborators do not diligently pursue product development efforts, we may not be able to develop our technologies or product candidates, which could slow our growth and decrease the market value of our common stock.

We do not have financial resources ourselves to fully develop, obtain regulatory approval for and commercialize our product candidates. We have relied, and expect to continue to rely, on collaborations with other biopharmaceutical companies to provide funding for our research and development efforts, including preclinical studies and clinical tests, and expect to rely significantly on such collaborations to provide funding for the lengthy regulatory approval processes required to commercialize our product candidates.

For example, on August 2, 2024, we entered into the Genentech Agreement with Genentech to develop intravenously administered genomic medicines to treat certain neurodegenerative diseases. Under the terms of Genentech Agreement, we were responsible for completing a technology transfer and certain preclinical activities, and Genentech is solely responsible for all clinical development, regulatory interactions, manufacturing and global commercialization of resulting products.

We were party to collaboration agreements with Novartis and Biogen to develop product candidates to treat certain neurological diseases. In June 2023, our collaboration agreements with Novartis and Biogen terminated. We were also party to a collaboration agreement with Kite to develop engineered cell therapies for cancer, which expired by its terms in April 2024. As a result of these terminations and expirations, we are no longer entitled to any milestone payments or royalties from Novartis, Biogen or Kite, and such counterparties have no further obligations to develop or to reimburse the costs of any of the programs under the applicable agreement. We cannot guarantee that we will be able to successfully secure new collaborations in the future.

If we are unable to secure additional collaborations or if our collaborators are unable or unwilling to diligently advance the development, regulatory approval and commercialization of our product candidates, our growth may slow and adversely affect our ability to generate funding for development of our technologies and product candidates as well as our ability to continue to operate as a going concern, and we may be required to cease operations. For example, although we have decided to begin executing Biologics License Application, or BLA, readiness activities for our Fabry disease program, we continue to advance

ongoing business development discussions with potential collaboration partners. There can be no assurance our efforts to secure a collaboration will be successful in a timely manner, or at all, in which case, we may not receive any return on our investments in these programs and our ability to continue to operate as a going concern may be materially and adversely affected. In addition, our ongoing collaborators may sublicense or abandon development programs with little advance notice, or we may have disagreements or disputes with our collaborators, which would cause associated product development to slow or cease. In addition, the business or operations of our collaborators may change significantly through restructurings, acquisitions, other strategic transactions that may negatively impact their ability to advance our programs.

Under typical collaborations, we expect to receive revenue for the research and development of our product candidates based on achievement of specific milestones, as well as royalties based on a percentage of sales of any commercialized products. Achieving these milestones will depend, in part, on the efforts of our collaborators, which we have no control over, as well as our own efforts. In addition, business combinations, changes in a collaborator's business strategy and financial difficulties or other factors could result in that collaborator abandoning or delaying development of any product candidates covered by our collaboration agreement with that collaborator. For example, Novartis's and Biogen's decisions to terminate their respective collaboration agreements with us each related to a recent strategic review. Further, if we fail or any collaboration partner fails to meet specific milestones, then the collaboration agreement may be terminated, which would preclude our ability to earn any additional milestone payments under that collaboration agreement and would reduce our revenues. In addition, even if a collaboration product candidate is successfully developed and approved for marketing by relevant regulatory authorities, if sales of the commercialized product fail to meet expectations, we could receive lower royalties than expected. In any event, the milestone and royalty payment opportunities associated with our collaborations involve a substantial degree of risk to achieve and may never be received. Accordingly, investors should not assume that we will receive all of the potential milestone payments provided for under our ongoing collaborations, and it is possible that we may never receive any further significant milestone payments or any royalty payments under our collaborations.

We have fully impaired our goodwill and indefinite-lived intangible assets, have recorded significant impairment of our long-lived assets, and may be required to record significant additional charges if our long-lived assets become further impaired in the future.

We evaluate the carrying value of long-lived assets, which include property and equipment, leasehold improvements and right-of-use assets, for impairment whenever events or changes in circumstances indicate that the carrying amounts of the asset may not be fully recoverable. Factors that may indicate potential impairment and trigger an impairment test include, but are not limited to, general macroeconomic conditions, conditions specific to the industry and market, an adverse change in legal factors, business climate or operational performance of the business, and sustained decline in the stock price and market capitalization compared to the net book value. During the year ended December 31, 2023 and the nine months ended September 30, 2024, we recognized impairment charges of $155.0 million and $5.5 million, respectively. We have fully impaired our goodwill and indefinite-lived intangible assets in 2023 and have significantly impaired our long-lived assets in both 2023 and 2024. We will continue to assess whether our long-lived assets are impaired in future periods. We are finalizing the wind-down of our France operations and corresponding reduction in force of all France employees, as well as the closure of our Brisbane facility, and we have recognized related impairments in the past twelve months. It is reasonably possible that additional impairment charges will be recognized, for example, if sublease rates of leased facilities or selling prices of the assets held for sale are less than those estimated. For additional information regarding these impairment charges, see Note 6 – *Impairment and Write-Down of Assets Held For Sale* in the accompanying notes to the Condensed Consolidated Financial Statements included in Part I, Item 1 of this Quarterly Report on Form 10-Q.

It is possible that changes in circumstances, many of which are outside of our control, or in the numerous variables associated with the assumptions and estimates used in assessing the appropriate valuation of our long-lived assets, could in the future result in significant additional impairment charges to our long-lived assets, which could adversely affect our results of operations.

Our failure to meet the listing standards of the Nasdaq Stock Market LLC, or Nasdaq, could result in the delisting of our common stock. Delisting could adversely affect the liquidity of our common stock and the market price of our common stock could decrease, and our ability to obtain sufficient additional capital to fund our operations and to continue to operate as a going concern would be substantially impaired.

On April 24, 2024, we received a deficiency notice, or the Notice, from the Listing Qualifications Staff, or the Staff of Nasdaq, notifying us that, for the prior 30 consecutive business days, the bid price of our common stock had closed below $1.00 per share, thereby failing to satisfy the minimum closing bid price requirement set forth in the continued listing requirements of Nasdaq Listing Rule 5450(a)(1), or the Bid Price Requirement. The Notice had no immediate effect on the listing of our common stock on the Nasdaq Global Select Market. In accordance with Nasdaq Listing Rule 5810(c)(3)(A), we had 180 calendar days, or until October 21, 2024, or the Compliance Date, to regain compliance with the Bid Price Requirement by having shares of our

common stock maintain a minimum closing bid price of at least $1.00 per share for a minimum of 10 consecutive trading days before the Compliance Date.

As we had not regained compliance with the Bid Price Requirement by the Compliance Date, we filed an application to transfer the listing of our Common Stock from the Nasdaq Global Select Market to the Nasdaq Capital Market. On October 24, 2024, we received approval from the Staff of Nasdaq to transfer the listing of our common stock from the Nasdaq Global Select Market to the Nasdaq Capital Market, or the Approval. Our common stock was transferred to the Nasdaq Capital Market effective as of the opening of business on October 26, 2024 and has continued to trade under the symbol "SGMO." The Nasdaq Capital Market operates in substantially the same manner as the Nasdaq Global Select Market, and listed companies must meet certain financial requirements and comply with Nasdaq's corporate governance requirements. As a result of the Approval, we were granted an additional 180-day grace period, or until April 21, 2025, or the Second Compliance Date, to regain compliance with the Bid Price Requirement.

On November 5, 2024, we received a letter from the Staff of Nasdaq confirming that our common stock had regained compliance with the Bid Price Requirement, and as a result, our common stock will continue to be listed on the Nasdaq Capital Market.

There can be no assurance that we will continue to meet the Bid Price Requirement, or any other Nasdaq continued listing requirements, in the future. If we fail to meet any of these requirements, including the Bid Price Requirement, Nasdaq may again notify us that we have failed to meet the minimum listing requirements and initiate the delisting process. If our common stock were delisted from Nasdaq, trading of our common stock could be conducted in the over-the-counter market or on an electronic bulletin board established for unlisted securities such as the Pink Sheets or the OTC Bulletin Board, but there can be no assurance that our common stock will be eligible for trading on such alternative exchange or market. Additionally, if our common stock were delisted from Nasdaq, the liquidity of our common stock would be adversely affected, the market price of our common stock could decrease, our ability to obtain sufficient additional capital to fund our operations and to continue to operate as a going concern would be substantially impaired and transactions in our common stock could lose federal preemption of state securities laws. Furthermore, there could also be a further reduction in our coverage by securities analysts and the news media and broker-dealers may be deterred from making a market in or otherwise seeking or generating interest in our common stock, which could cause the price of our common stock to decline further. Moreover, delisting may also negatively affect our collaborators', vendors', suppliers' and employees' confidence in us and employee morale.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES, USE OF PROCEEDS, AND ISSUER PURCHASES OF EQUITY SECURITIES

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		Restated Certificate of Incorporation (incorporated by reference to Exhibit 3.3 to the Company's Current Report on Form 8-K filed June 2, 2023).
3.2		Certificate of Amendment of the Certificate of Incorporation (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed June 5, 2024).
3.3		Fifth Amended and Restated Bylaws (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed December 19, 2022).
10.1+	‡	License Agreement between the Company and Genentech, Inc., dated August 2, 2024.
10.2+		Third Amendment to Lease Agreement between the Company and PPF OFF 7000 Marina Boulevard LP dated July 3, 2024.
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	**	Inline XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
101.SCH	**	Inline XBRL Taxonomy Extension Schema With Embedded Linkbase Documents.
104		The cover page from Sangamo's Quarterly Report on Form 10-Q for the three months ended September 30, 2024 is formatted in Inline XBRL Taxonomy Extension 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.

** Pursuant to Rule 406T of Regulation S-T, these interactive data files are deemed not filed or part of a registration statement or prospectus for purposes of Section 11 or 12 of the Securities Act of 1933 or Section 18 of the Securities Exchange Act of 1934 and otherwise are not subject to liability.

‡ Certain portions of this exhibit (indicated by "[*]") have been omitted in accordance with 17 CFR § 229.601(b).

\+ 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: November 12, 2024

SANGAMO THERAPEUTICS, INC.

/s/ ALEXANDER D. MACRAE

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

/s/ PRATHYUSHA DURAIBABU

Prathyusha Duraibabu
Senior Vice President and Chief Financial Officer
(Principal Financial and Accounting Officer)

Exhibit 10.1

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) the type that the Registrant treats as private or confidential.

LICENSE AGREEMENT

BETWEEN

SANGAMO THERAPEUTICS, INC.

AND

GENENTECH, INC.

AS OF AUGUST 2, 2024

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EXHIBITS

LICENSE AGREEMENT

THIS LICENSE AGREEMENT ("**Agreement**") is made and entered into as of August 2, 2024 ("**Effective Date**"), by and between Sangamo Therapeutics, Inc. having its principal place of business at 501 Canal Blvd., Richmond, CA 94804 ("**Sangamo**") and Genentech, Inc., a Delaware corporation, having its principal place of business at 1 DNA Way, South San Francisco, California 94080 ("**Genentech**"). Sangamo and Genentech are sometimes referred to herein individually as a "**Party**" and collectively as the "**Parties**."

BACKGROUND

WHEREAS, Sangamo is developing STAC-BBB and certain zinc finger technologies directed to tau and [*].

WHEREAS, Genentech is a biopharmaceutical company that is engaged in the discovery, research, development, manufacture and sale of pharmaceutical products.

WHEREAS, subject to the terms of this Agreement, Sangamo wishes to grant to Genentech, and Genentech wishes to receive from Sangamo, an exclusive license under Sangamo's intellectual property rights to research, develop, manufacture, commercialize and otherwise exploit STAC-BBB, certain variants of STAC-BBB, and zinc finger technologies directed to tau and [*].

NOW THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Genentech and Sangamo agree as follows:

ARTICLE 1 Definitions

1.1 "**[*]**" means the [*], including any [*].

1.2 "**[*]**" means the period commencing on the Effective Date and ending on the earlier of: (a) [*] and (b) [*].

1.3 "**Abandonment Notice**" has the meaning set forth in Section 9.6.1(b).

1.4 "**Accounting Standard**" means, with respect to an entity, either: (a) International Financial Reporting Standards ("**IFRS**"); or (b) United States generally accepted accounting principles ("**GAAP**"), in either case, which standards or principles (as applicable) are then-currently used at the applicable time, and as consistently applied, by such entity.

1.5 "**Acquirer**" means (a) any "person" or "group" described in Section 1.21(a) for so long as such "person" or "group" retains beneficial ownership of more than fifty percent (>50%) of the Voting Stock of Sangamo or otherwise has the power, directly or indirectly, to elect a majority of the members of the Board of Directors of Sangamo or (b) any Third Party described in Section 1.21(b) or (c) for so long as such Third Party remains an Affiliate of Sangamo.

1.6 "**Acquisition Affiliate**" has the meaning set forth in Section 6.3.

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1.7 "**Affiliate**" means any entity that, directly or indirectly (through one or more intermediaries) controls, is controlled by, or is under common control with a Party, at any point in time and for so long as such control exists. For purposes of this Section 1.5, "controls", "controlled", and "control" means (a) the direct or indirect ownership of more than fifty percent (>50%) of the voting stock or other voting interests or interest in the profits of the applicable Party or entity or (b) the ability to otherwise control or direct the decisions of the board of directors or equivalent governing body thereof. Notwithstanding the foregoing, for purposes of this Agreement, none of Chugai Pharmaceutical Co., Ltd ("**Chugai**") or any business entity controlled by Chugai, will be considered an Affiliate of Genentech, unless and until Genentech elects to include one or more of Chugai or any such business entity as an Affiliate of Genentech, by providing notice to Sangamo of such election.

1.8 "**Alliance Manager**" has the meaning set forth in Section 4.3.

1.9 "**Annual Net Sales**" means, with respect to a Product, all Net Sales of such Product during a calendar year.

1.10 "**Applicable Law**" means any and all laws, statutes, codes, ordinances, orders, rules, rulings, directives and regulations of any kind whatsoever of any governmental authority within the relevant jurisdiction applicable to the relevant activity.

1.11 "**[*]**" has the meaning set forth in Section 3.1.2.

1.12 "**Authorized Purposes**" has the meaning set forth in Section 3.1.2.

1.13 "**Authorized Subcontractor**" means, with respect to any [*], a subcontractor of Sangamo approved by Genentech in writing to perform such activity ("**Subcontracted Activity**"). The pre-approved Authorized Subcontractors as of the Effective Date are listed in Exhibit 1.13.

1.14 "**Business Day**" means any day, other than a Saturday, Sunday or day on which commercial banks located in the United States or Switzerland are authorized or required by Applicable Law to be closed.

1.15 "**Capsid**" means any functional assembly of proteins (including fragments and derivatives thereof) which serves to package, coat or encapsulate a Payload for delivery to cells.

1.16 "**[*]**" means any [*].

1.17 "**[*]**" has the meaning set forth in Section 3.1.1.

1.18 "**[*]**" has the meaning set forth in Section 3.1.4.

1.19 "**[*]**" has the meaning set forth in Section 3.1.3.

1.20 "**Challenge**" has the meaning set forth in Section 9.7.1.

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1.21 "**Change in Control**" means, with respect to Sangamo, if any of the following occurs after the Effective Date:

(a) any "person" or "group" (as such terms are defined below) (i) becomes the "beneficial owner" (as defined below), directly or indirectly, of shares of capital stock or other interests (including partnership interests) of Sangamo then outstanding and normally entitled (without regard to the occurrence of any contingency) to vote in the election of the directors, managers or similar supervisory positions ("**Voting Stock**") of Sangamo representing more than fifty percent (>50%) of the total voting power of all outstanding classes of Voting Stock of Sangamo or (ii) acquires the power, directly or indirectly, to elect a majority of the members of the board of directors or similar governing body ("**Board of Directors**") of Sangamo; or

(b) Sangamo enters into a merger, consolidation or similar transaction with a Third Party (whether or not Sangamo is the surviving entity) and as a result of such merger, consolidation or similar transaction (i) the members of the Board of Directors of Sangamo immediately prior to such transaction constitute less than a majority of the members of the Board of Directors of Sangamo or of such surviving entity immediately following such transaction or (ii) the individuals or entities that beneficially owned, directly or indirectly, the shares of Voting Stock of Sangamo immediately prior to such transaction cease to beneficially own, directly or indirectly, shares of Voting Stock of Sangamo representing at least a majority of the total voting power of all outstanding classes of Voting Stock of the surviving entity in substantially the same proportions as their ownership of Voting Stock of Sangamo immediately prior to such transaction; or

(c) Sangamo sells or transfers to any Third Party, in one or more related transactions, properties or assets representing all or substantially all of Sangamo's assets to which this Agreement relates.

For purposes of this Section 1.21, (x) "person" and "group" have the meanings given such terms under Section 13(d) and 14(d) of the United States Securities Exchange Act of 1934 and the term "group" includes any group acting for the purpose of acquiring, holding or disposing of securities within the meaning of Rule 13d-5(b)(1) under the said Act; (y) a "beneficial owner" will be determined in accordance with Rule 13d-3 under the aforesaid Act; and (z) the terms "beneficially owned" and "beneficially own" will have meanings correlative to that of "beneficial owner." Notwithstanding the foregoing, (A) a transaction solely to change the domicile of Sangamo; (B) Sangamo's public offering of equity shares pursuant to a registration statement filed under the United States Securities and Exchange Act of 1933, or (C) any merger or consolidation between a Sangamo and one or more Affiliates will not constitute a Change in Control.

1.22 "**Combination Product**" means (a) a single pharmaceutical formulation containing as its active ingredients both a Licensed Payload and one or more other Payloads, (b) a combination therapy comprised of (i) a Product and (ii) one or more other therapeutically or prophylactically active ingredients, which are either priced and sold in a single package containing such multiple

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products or packaged separately but sold together for a single price, or (c) a combination therapy comprised of (i) a Product and (ii) a companion diagnostic, priced and sold in a single package containing such multiple products or packaged separately but sold together for a single price, in each case ((a) (b), and (c)), including all dosage forms, formulations, presentations, line extensions, and package configurations.

1.23 "**Commercially Reasonable Efforts**" means, with respect to a Party, the level of efforts consistent with the efforts such Party devotes to a pharmaceutical product that it has under a similar stage of research, development or commercialization, as applicable, in a similar area with similar market potential and similar strategic value in its portfolio, taking into account its safety and efficacy, its cost to develop and commercialize, its proprietary position, the likelihood of obtaining Marketing Authorization(s) and product reimbursement, anticipated profitability, return on investment, and other regulatory, technical, legal, scientific, medical or commercial factors, all in the context of other internal and external competitive products in development or on the market (including other products such Party may have in its portfolio), provided that with respect to Sangamo, such efforts will be at least consistent with those a similarly situated biotechnology company (on its own or acting through any of its affiliates, sublicensees or subcontractors) would use to accomplish a similar task or obligation under similar circumstances. It is understood that the level of Commercially Reasonable Efforts may change from time to time based upon regulatory, technical, legal, scientific, medical or commercial factors as stated above.

1.24 "**Competing Program**" has the meaning set forth in Section 6.3.

1.25 "**Competitive Product**" means (a) with respect to a Product in a particular regulatory jurisdiction, any pharmaceutical product (i) (x) approved by the applicable Regulatory Authority as generic, biosimilar to or interchangeable with such Product pursuant to Section 351(k) of the Public Health Service Act, Article 10(4) of Directive 2001/83/EC and Section 4, Part II, Annex I of the European legislation, or any equivalent legislation in other countries, or any successor provision of any of the foregoing, or any implementing legislation, directive or regulation of any of the foregoing, or (y) for which the applicable Regulatory Authority has authorized one or more Clinical Trials to be foregone, in each case (x) or (y), wherein the Product was the reference product relied upon in making such determination, and (ii) that is approved for commercial sale in such country and sold by a (1) Third Party that is not Genentech, its Affiliate or Sublicensee and that has not otherwise been authorized, directly or indirectly, by Genentech to market and sell such product or (2) Compulsory Sublicensee, (b) with respect to [*].

1.26 "**Compulsory Sublicense**" means a license or sublicense granted to a Third Party, through the order, decree or grant of a governmental authority having competent jurisdiction, authorizing such Third Party to make, use, sell, offer for sale, import or export a Product in any country.

1.27 "**Compulsory Sublicensee**" means a Third Party that was granted a Compulsory Sublicense.

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1.28 "**Confidential Information**" has the meaning set forth in Section 10.1.

1.29 "**Continuation Election Notice**" has the meaning set forth in Section 14.6.5.

1.30 "**Continuation Election Report**" has the meaning set forth in Section 14.6.5.

1.31 "**Control**" (including variations such as "Controlled" and the like) means, (a) with respect to any Patent, Know-How or any other intellectual property right, the rightful possession by a Party of the ability to grant a license, sublicense or other right to exploit (other than by operation of any license granted herein) such Patent, Know-How or other intellectual property right, or (b) with respect to proprietary materials, the rightful possession by a Party of the ability to supply such proprietary materials to the other Party, in each case (a) and (b), in accordance with the terms and conditions set forth herein and without violating the terms of any agreement with any Third Party. Notwithstanding anything to the contrary in this Agreement, in the event of a Change in Control, the following will not be deemed to be Controlled by Sangamo: (i) any intellectual property (including Patents and Know-How) owned or licensed by the Acquirer immediately prior to the closing of such Change in Control; and (ii) any intellectual property (including Patents and Know-How) that any Acquirer subsequently acquires or develops [*].

1.32 "**Cover**" (including variations such as "**Covered**", "**Covering**" and the like) means, with respect to a Valid Claim and in reference to a particular Product (in each case, whether alone or in combination with one or more ingredients) that the use, sale, offer for sale or import of such Product in a country would, but for ownership thereof or a license granted in this Agreement thereunder, infringe such Valid Claim in the applicable country on the date of sale.

1.33 "**CPA Firm**" has the meaning set forth in Section 8.9.2.

1.34 "**CRL**" has the meaning set forth in Section 2.4.

1.35 "**Cure Period**" has the meaning set forth in Section 14.2.

1.36 "**DevGo Approval**" [*].

1.37 "**Directed To**" means [*].

1.38 "**Disclosing Party**" has the meaning set forth in Section 10.1.

1.39 "**Disposition Transaction**" has the meaning set forth in Section 7.9.

1.40 "**Divestiture**" has the meaning set forth in Section 6.3.2.

1.41 "**Escalation Notice**" has the meaning set forth in Section 15.1.

1.42 "**EU5**" means the United Kingdom, Germany, France, Spain and Italy.

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1.43 "**Expert**" means a person who has no less than ten (10) years of relevant experience in the pharmaceutical industry and has occupied at least one (1) senior position within a large pharmaceutical company and who is fluent in the English language, excluding any current or former employee or consultant of either Party.

1.44 "**Exploit**" means research, develop, make, have made, use, sell, offer for sale, import, export and otherwise exploit.

1.45 "**FDA**" means the United States Food and Drug Administration, or any successor entity thereto performing similar functions.

1.46 "**First Commercial Sale**" means, with respect to a particular Product in a given country, the first bona fide commercial sale to a Third Party of such Product following Marketing Authorization in such country by or under authority of Genentech (or its Affiliates or Sublicensee(s) hereunder [*].

1.47 "**GNE Manufacturing Improvement IP**" means any Manufacturing Improvement(s) first conceived, reduced to practice or otherwise invented by or on behalf of Genentech (solely or jointly with Sangamo) [*], and the intellectual property rights therein.

1.48 "**GNE STAC-BBB Improvement IP**" means [*].

1.49 "**Indemnitee**" has the meaning set forth in Section 13.3.

1.50 "**Indemnitor**" has the meaning set forth in Section 13.3.

1.51 "**Indication**" means a recognized type of human medical disease or condition, provided that [*]. For purposes of the foregoing [*].

1.52 "**Indirect Tax**" has the meaning set forth in Section 8.8.

1.53 "**Information Security Incident**" has the meaning set forth in Section 10.8.1.

1.54 "**Infringement**" has the meaning set forth in Section 9.7.1.

1.55 "**Inventor Remuneration**" has the meaning set forth in Section 9.6.7.

1.56 "**Inventory List**" has the meaning set forth in Section 2.4.

1.57 "**IP Committee**" has the meaning set forth in Section 9.2.

1.58 "**Joint IP**" means all inventions, discoveries, creations and works, including Know-How, compositions of matter, articles of manufacture or other subject matter, whether patentable or copyrightable or not, that are first jointly conceived, reduced to practice or otherwise invented in the performance of this Agreement by or on behalf of both Parties, as determined in accordance

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with United States patent and copyright laws and other Applicable Laws in the United States, and the intellectual property rights therein.

1.59 "**Know-How**" means any non-public information, including data, know-how, inventions, discoveries, creations, works, trade secrets, specifications, instructions, processes, formulae, methods, protocols, techniques, designs, results, test data, pharmacological, toxicological, pharmacokinetic, pre-clinical and clinical information, reports, structure-activity relationship data, statistical analysis, models and information regarding discovery, development, marketing, pricing, distribution, cost, sales and manufacturing. For clarity, Know-How excludes Patents and tangible materials.

1.60 "**Launch Quarter**" has the meaning set forth in Section 7.8.3.

1.61 "**Licensed [*]**" means any [*].

1.62 "**Licensed Capsid**" means STAC-BBB or a Licensed STAC-BBB [*], in each case, with or without any Licensed STAC-BBB Improvement(s).

1.63 "**Licensed Capsid Patent**" means any Patent within the Licensed IP that claims [*].

1.64 "**Licensed IP**" means all Trademarks related to any Licensed Capsid and all intellectual property rights Controlled by Sangamo or any of its Affiliates as of the Effective Date or at any time during the Term that are necessary or reasonably useful to Exploit Products, including those Patents listed in Exhibit 1.64.

1.65 "**Licensed Payload**" means a Licensed Tau Payload or a [*].

1.66 "**Licensed Payload Improvement IP**" means [*].

1.67 "**Licensed Payload Patent**" means any Patent within the Licensed IP that claims a [*] without reference to any specific Capsid or other delivery vehicle or method, including those Patents listed in Section A of Exhibit 1.64 [*] and Section B of Exhibit 1.64 (the "**Existing Licensed Tau Payload Patents**").

1.68 "**Licensed Product Patent**" means [*].

1.69 "**Licensed STAC-BBB Improvement**" means [*] on or prior to the first anniversary of the Effective Date.

1.70 "**Licensed** [*]" means a [*] in accordance with Section 3.1.3.

1.71 "**Licensed Tau Payload**" means any portion of a Payload that encodes a zinc finger protein Directed To Tau, intellectual property rights in which are Controlled by Sangamo prior to the Effective Date or at any time during the Term prior to expiration of the Tau Exclusivity Period, including those sequences listed in the Existing Licensed Tau Payload Patents, including

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the [*] as listed in Exhibit 1.71. For clarity, for any such Payload that [*] refers only to the portion of such Payload that [*].

1.72 "[*].

1.73 "**Loss**" or "**Losses**" has the meaning set forth in Section 13.1.

1.74 "**Manufacturing Improvement**" means any improvement, modification or enhancement to a manufacturing process, provided such manufacturing process is (a) [*] and (b) disclosed by Sangamo to Genentech in accordance with this Agreement. For clarity, any manufacturing process first conceived, reduced to practice or otherwise invented by or on behalf of Genentech, its Affiliate or a Third Party without the use of or reference to Confidential Information or materials of Sangamo or Product Information, in each case, provided by Sangamo to Genentech hereunder will not be deemed a Manufacturing Improvement hereunder.

1.75 "**Marketing Authorization**" means, with respect to a Product and an Indication, final Regulatory Approval (including pricing approval, where required) required to sell such Product for such Indication in accordance with the Applicable Law of a given country or jurisdiction.

1.76 "**Negotiation Period**" has the meaning set forth in Section 7.9.

1.77 "**Net Sales**" means, for a Product in a particular period, the amount calculated by subtracting from the Sales of such Product for such period:

1.77.1 [*]

1.77.2 [*] and

1.77.3 [*].

For clarity, [*].

1.78 "**Non-Disclosure Agreement**" means the Amended and Restated Mutual Confidentiality Agreement between the Parties effective December 15, 2023.

1.79 "**Other Sangamo Capsid**" means any Capsid, intellectual property rights in which are controlled by Sangamo or a Third Party prior to the Effective Date or at any time during the Term, other than a Licensed Capsid.

1.80 "**Other Sangamo Payload**" means any portion of a Payload that encodes a zinc finger protein, intellectual property rights in which are controlled by Sangamo prior to the Effective Date or at any time during the Term, other than a Licensed Payload.

1.81 "**Patent(s)**" means any and all patents and patent applications and any patents issuing therefrom or claiming priority thereto, worldwide, together with any extensions (including patent term extensions and supplementary protection certificates) and renewals thereof, reissues, re-

examinations, substitutions, confirmation patents, registration patents, invention certificates, patents of addition, renewals, divisionals, continuations, and continuations-in-part of any of the foregoing. For clarity, Patents exclude Know-How and tangible materials.

1.82 "**Payload**" means an active pharmaceutical ingredient, including but not limited to nucleic acid molecules.

1.83 "**Payable Milestone**" has the meaning set forth in Section 7.5.

1.84 "**Payment Rights**" has the meaning set forth in Section 7.9.

1.85 "**Permitted Use**" has the meaning set forth in Section 10.3.

1.86 "**Phase 1 Trial**" means a human clinical trial, the principal purpose of which is preliminary determination of safety and pharmacokinetics of a pharmaceutical product in healthy individuals or patients as further described in 21 C.F.R. § 312.21, or similar clinical study in a country other than the United States, and which is prospectively designed to generate sufficient clinical data, including data sufficient to determine dosing, to proceed directly to a Phase 2 Trial of such product, or similar clinical study in a country other than the United States.

1.87 **"Phase 2 Trial**" means a human clinical trial, for which the primary endpoints include a determination of dose ranges or a preliminary determination of efficacy of a pharmaceutical product in patients being studied as further described in 21 C.F.R. § 312.21, or similar clinical study in a country other than the United States.

1.88 "**Phase 3 Trial**" means a human clinical trial, the principal purpose of which is to demonstrate clinically and statistically the efficacy and safety of a pharmaceutical product for one or more Indications in order to obtain Marketing Authorization of such product for such Indication(s), as further defined in 21 C.F.R. § 312.21 or a similar clinical study in a country other than the United States.

1.89 "[*] has the meaning set forth in Section 3.1.2.

1.90 "**Product**" means any pharmaceutical product, including any Combination Product, containing:

1.90.1 a Licensed Capsid [*] and a Licensed Payload(s) (each Product described in this Section 1.90.1, a "**Two-Component Product**");

1.90.2 a Licensed Capsid [*] and no Licensed Payload; or

1.90.3 a Licensed Payload(s) and no Licensed Capsid (each Product described in Sections 1.90.2 and 1.90.3, a "**One-Component Product**").

For clarity, the Product [*].

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1.91 "**Product Information**" has the meaning set forth in Section 10.1.

1.92 "**Product Trademark**" has the meaning set forth in Section 9.6.9.

1.93 "**Prosecution and Maintenance**", "**Prosecute and Maintain**" or "**Prosecute or Maintain**" means, with respect to a given Patent, all activities associated with the preparation, filing, prosecution, and maintenance of such Patent as well as supplemental examinations, re-examinations, reissues, applications for patent term extensions, calculation and applications for patent term adjustments, supplementary protection certificates, and the like (as applicable) with respect to such Patent. For clarity, Prosecute and Maintain will not include any such actions with respect to a Patent brought by a Third Party, including any reexaminations, inter partes reviews, and post grant reviews, as well as interferences and derivation proceedings, oppositions and other similar proceedings brought by a Third Party with respect to such Patent.

1.94 "**Publication**" has the meaning set forth in Section 11.6.

1.95 "**Receiving Party**" has the meaning set forth in Section 10.1.

1.96 "**Region**" means each of (a) [*], (b) [*], (c) [*] and (d) all countries in the world other than countries included in (a) through (c).

1.97 "**Regulatory Approval**" means, with respect to a pharmaceutical product in a country or jurisdiction, any and all approvals (including investigational new drug applications, new drug applications or biologics license applications, and any supplements thereto), licenses, registrations, or authorizations of any Regulatory Authority necessary to manufacture, use, store, import, transport, commercially distribute, sell, or market such pharmaceutical product in such country, including, where applicable, (a) pricing or reimbursement approval in such country, (b) post-approval marketing authorizations (including any prerequisite manufacturing approval or authorization related thereto), and (c) labeling approval.

1.98 "**Regulatory Authority**" means any federal, national, multinational, state, provincial or local regulatory agency, department, bureau or other governmental entity with authority over the development, manufacturing, commercialization or other use or exploitation (including the granting of Regulatory Approvals or Marketing Authorizations) of pharmaceutical products in any jurisdiction, including the FDA.

1.99 "**Release**" has the meaning set forth in Section 11.2.

1.100 "**Residuals**" has the meaning set forth in Section 10.6.

1.101 "**Reversion IP**" has the meaning set forth in Section 14.6.6(h).

1.102 "**Reversion License**" has the meaning set forth in Section 14.6.6(h).

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1.103 "**Royalty Term**" means, on a country-by-country and Product-by-Product basis, the period commencing upon the date of the First Commercial Sale of such Product in such country and ending on [*].

1.104 "**Sales** " means, for a Product in a particular period, the sum of 1.104.1, 1.104.2, and 1.104.3.

1.104.1 [*].

By way of example, [*] include the following:

(a) [*];

(b) [*];

(c) [*];

(d) [*]; and

(e) [*].

1.104.2 [*].

1.104.3 [*].

1.104.4 [*].

1.105 "**Sangamo [*]**" means the [*].

1.106 "**Sangamo [*]** has the meaning set forth in Section 10.3.

1.107 "[*****]" has the meaning set forth in Section 3.1.2.

1.108 "**Skipped Milestone**" has the meaning set forth in Section 7.5.

1.109 "**STAC-BBB**" means Sangamo's proprietary blood-brain barrier penetrant Capsid referred to as STAC-BBB. The sequence of STAC-BBB is set forth in Exhibit 1.109.

1.110 "**STAC-BBB Improvement**" means [*].

1.111 "**STAC-BBB** [*]" means [*].

1.112 "[*]" has the meaning set forth in Section 3.1.1.

1.113 "**STAC-BBB** [*]" means [*].

1.114 "[*****]" has the meaning set forth in Section 3.1.2.

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1.115 "[**]" has the meaning set forth in Section 3.1.4.

1.116 "**Sublicensee**" means any Third Party, other than a Compulsory Sublicensee, to which Genentech or any of its Affiliates grants a sublicense (through one or multiple tiers) under the license granted pursuant to Section 5.2 to commercialize a Product.

1.117 "**Target**" means [*] or Tau.

1.118 "**Tau**" means [*].

1.119 "**Tau Exclusivity Period**" means [*].

1.120 "**Tech Transfer Completion Date**" has the meaning set forth in Section 2.3.

1.121 "**Technology Transfer**" has the meaning set forth in Section 2.1.

1.122 "**Technology Transfer Committee**" has the meaning set forth in Section 2.2.

1.123 "**Technology Transfer Plan**" has the meaning set forth in Section 2.1.

1.124 "**Term**" has the meaning set forth in Section 14.1.

1.125 "**Terminated Product**" means [*].

1.126 "**Third Party**" means any entity other than a Party or any of its Affiliates.

1.127 "**Third Party Claims**" has the meaning set forth in Section 13.1.

1.128 "**Title 11**" has the meaning set forth in Section 14.3.

1.129 "**Trademark**" means any word, name, symbol, color, designation or device or any combination thereof that functions as a source identifier, including any trademark, trade dress, brand mark, service mark, trade name, brand name, logo or business symbol, whether or not registered.

1.130 "**Transfer Agreement**" has the meaning set forth in Section 14.6.6(i).

1.131 "**Transfer Agreement Negotiation Period**" has the meaning set forth in Section 14.6.6(i).

1.132 "**Transferred Know-How**" has the meaning set forth in Section 2.1.

1.133 "**Trial**" means a Phase 1 Trial, Phase 2 Trial or Phase 3 Trial.

1.134 "**Valid Claim**" means, [*].

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ARTICLE 2 Technology Transfer

2.1 **Technology Transfer**. Sangamo will (a) transfer to Genentech all Know-How within the Licensed IP that is (i) listed in the technology transfer plan set forth in Exhibit 2.1 (the "**Technology Transfer Plan**") including those sequences, materials, inventory, documents, records, methods, reagents, and assays described in the Technology Transfer Plan, (ii) existing as of the Effective Date and necessary to exploit the Products or (iii) existing as of the Effective Date, reasonably useful to exploit the Products and requested by Genentech (such Know-How in clauses (i) through (iii), collectively, the "**Transferred Know-How**") and (b) otherwise carry out the activities described in the Technology Transfer Plan, and use diligent efforts to do so in accordance with the timelines set forth in the Technology Transfer Plan (collectively, such transfer and the activities set forth in the Technology Transfer Plan, the "**Technology Transfer**"). For clarity, the Transferred Know-How, the Inventory List and the samples provided pursuant to Section 2.4 shall exclude all Know-How and materials related to (i) any [*] or [*], (ii) Sangamo's program Directed To [*]; and (iii) Sangamo's proprietary platform technologies [*]. Each Party will bear its own costs incurred in the performance of the Technology Transfer. Except as otherwise specified in the Technology Transfer Plan, any materials and inventory shipped by Sangamo to Genentech will be shipped from Sangamo to Genentech DAP (location to be provided by Genentech) Incoterms 2020.

2.2 **Technology Transfer Committee.** As of the Effective Date, the Parties will establish a technology transfer committee (the "**Technology Transfer Committee**") comprised of the Alliance Managers from each Party and at least one (1) scientific leader from each Party with the appropriate level of seniority, availability, function in their respective organization, training, experience and decision-making authority to carry out the activities of the Technology Transfer Committee. The Technology Transfer Committee will (a) meet on a weekly basis (unless the Parties agree on alternate timing) until the Tech Transfer Completion Date to oversee and coordinate the Technology Transfer, and (b) review progress towards completion of the Technology Transfer. Either Party may invite a reasonable number of other employees, consultants, contractors or scientific advisors to attend a Technology Transfer Committee meeting with prior written notice to the other Party's Alliance Manager, provided that such invitees are bound by appropriate confidentiality and invention assignment obligations consistent with the terms of this Agreement. If the Technology Transfer Committee disagrees regarding the scope of the Technology Transfer or whether a particular item in the Technology Transfer Plan has been completed, either Party may submit the matter to the Alliance Managers to facilitate further discussion among the members of the Technology Transfer Committee (and if mutually agreed, their respective supervisors). If after such assistance, the Technology Transfer Committee still cannot resolve such matter in a timely fashion, either Party may refer the matter to the CEO of Sangamo or equivalent position or their nominee and Head of Corporate Business Development of Genentech or equivalent position or their nominee for resolution, who together will use good faith efforts to reach a decision by consensus within [*] after the date such matter is referred to them. If the CEO of Sangamo or equivalent position or their nominee and the Head of Corporate Business Development of Genentech or equivalent position or their nominee cannot reach such consensus decision, then either Party may refer the matter for resolution in

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accordance with ARTICLE 15. For clarity, the Technology Transfer Committee will serve only to facilitate the Technology Transfer and will not have any independent decision-making authority or power to amend, modify or waive compliance with this Agreement (including the Technology Transfer Plan), which may only be amended, modified or compliance with which may only be waived, as provided in Section 16.8.

2.3 **Completion of Technology Transfer**. Promptly following completion of the Technology Transfer, including completion of all activities set forth in the Technology Transfer Plan, Sangamo will provide notice to the Technology Transfer Committee thereof. Promptly (but in any event within [*] following receipt of such notice, the Technology Transfer Committee will meet to review the status of the Technology Transfer. Promptly (but in any event within [*] following such meeting, Genentech will provide notice to Sangamo either confirming completion of the Technology Transfer (the date of such confirmation, the "**Tech Transfer Completion Date**") or specifying any aspects of the Technology Transfer that remain incomplete. If Genentech provides the latter notice, promptly after receipt of such notice, Sangamo will complete the aspects of the Technology Transfer identified by Genentech as incomplete and thereafter, submit notice to Genentech in accordance with the first sentence of this Section 2.3.

2.4 **Transfer of Samples and DNA; Completion of Final Reports**. In addition to and separately from the Technology Transfer, promptly after the Tech Transfer Completion Date, Sangamo will, as quickly as reasonably possible, generate and provide to Genentech a list of inventory of samples from specimens that contain a Licensed [*] or Licensed Tau Payload in Sangamo's possession from the Tau-related and [*] pre-clinical studies it conducted (or had conducted on its behalf) prior to the Effective Date (including tissue samples and DNA), other than: (a) [*]; and (b) [*] (the "**Inventory List**"). Following receipt of such Inventory List, Genentech will select from such Inventory List the samples that Genentech wishes to receive, and Sangamo will promptly transfer to Genentech such selected samples to the extent such samples are Controlled by Sangamo, provided that if any such samples are not Controlled by Sangamo, Sangamo will respond to Genentech's Alliance Manager's reasonable inquiries regarding ownership and control of such samples without disclosing the confidential information of any Third Party to Genentech. Genentech will reimburse Sangamo for all reasonable out-of-pocket costs and expenses incurred by Sangamo in connection with the shipment of such selected samples. To the extent requested by Genentech, and in accordance with the timing requested by Genentech, [*].

2.5 **Ongoing Support**. After the Tech Transfer Completion Date, if either Party becomes aware that Sangamo failed to transfer any item required to be transferred to Genentech pursuant to the Technology Transfer, such Party will promptly provide written notice to the other Party thereof, which notice will identify such item, and Sangamo will promptly transfer such item to Genentech. During the Term, Sangamo will provide assistance to Genentech, as reasonably requested by Genentech, to enable Genentech to exercise the licenses set forth herein, provided that Sangamo will not be required to disclose (a) any of the excluded Know-How listed in the second sentence of Section 2.1 or (b) any STAC-BBB Improvements or Manufacturing Improvements to Genentech except as set forth in the Technology Transfer Plan.

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ARTICLE 3 [*]

3.1 **[*]**

3.1.1 **Sangamo Activities**. Subject to Section 3.1.4, Sangamo will conduct the activities described in [*] set forth in Exhibit 3.1.1 (the "**[*]**") and will use diligent efforts to conduct such activities in accordance with the timelines set forth therein. Promptly following completion of the activities described in the [*], Sangamo will provide to Genentech the results, sequences, data and materials listed in the section of the [*].

3.1.2 **[*]**. Genentech may [*]by providing notice to Sangamo thereof. Until Genentech [*], Sangamo will respond to all reasonable requests from Genentech for additional information regarding [*] and will meet with Genentech, upon Genentech's reasonable request. Genentech will [*]. No later than [*] after the [*], Sangamo will [*] Notwithstanding any provision to the contrary in ARTICLE 10 and except as set forth in this Section 3.1.2, the [*] and shall [*]. [*].

3.1.3 **Genentech Activities**. Following completion of the [*]in accordance with Section 3.1.1 or 3.1.4 (as applicable), Genentech will perform the [*] and such other activities (including additional non-human primate studies) necessary or reasonably useful to [*] as described in this Section 3.1.3 [*]. The [*] will not include (a) any activity [*] or (b) [*]. Genentech may, [*]. For clarity, any [*] in accordance with this Section 3.1.3 [*] Genentech will provide notice to Sangamo upon completion of the [*], provided that, notwithstanding [*] will be deemed complete upon [*] in accordance with this Section 3.1.3.

3.1.4 **[*].** Sangamo will promptly provide written notice to Genentech upon completion of each event described in the table [*]" in the [*] If Sangamo [*] and Sangamo does [*], Genentech may [*]. For clarity, Genentech's [*].

3.2 **Authorized Subcontractors.** Sangamo will not subcontract, without Genentech's consent, any material activities under the [*] to any Third Party, other than to the applicable Authorized Subcontractor. The activities performed by an Authorized Subcontractor on behalf of Sangamo will be made pursuant to a written subcontract specifying the work to be subcontracted and containing provisions consistent with the terms and conditions of this Agreement, including with respect to confidentiality and intellectual property. Sangamo will provide Genentech the opportunity to (a) participate in meetings with, audits or inspections of, or other assessments of any Authorized Subcontractor, and (b) review any draft and final reports prepared by an Authorized Subcontractor. Sangamo will use its diligent efforts to include the provisions set forth in Exhibit 3.2 in each subcontract with an Authorized Subcontractor under which a Subcontracted Activity will be performed, provided that if such Authorized Subcontractor does not agree to include one or more of the provisions set forth in Exhibit 3.2 despite the use of Sangamo's diligent efforts, Genentech will promptly propose alternative, commercially reasonable language for Sangamo to propose to such Authorized Subcontractor.

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3.3 **Reporting**. Sangamo will keep Genentech informed of its activities under the [*], including by [*] in accordance with [*].

3.4 **Costs**. Each Party will conduct its activities [*] at its own expense and in accordance with the terms and conditions of this Agreement.

3.5 **Research Records**. Each Party will, and will ensure that any of its Third Party subcontractors, maintain records in sufficient detail and in good scientific manner appropriate for Prosecution and Maintenance and regulatory purposes, and in compliance with Applicable Law. Such records will be complete and accurate and will properly reflect all work done and results achieved in performance of the [*]. Such records will record only activities conducted for the [*]and will not include or be commingled with records of activities other than those conducted pursuant thereto. Such records will be maintained by the applicable Party through the completion of the [*] and for [*] thereafter, or for such longer period as may be required by Applicable Law.

ARTICLE 4 Diligence and Reporting

4.1 **Diligence Obligations**. Except as set forth in ARTICLE 2 and ARTICLE 3, as between Genentech and Sangamo, Genentech will have the sole right to perform research, development, manufacturing and commercialization activities related to the Licensed Payloads and Products. Following the Tech Transfer Completion Date, Genentech will use Commercially Reasonable Efforts to develop and seek Marketing Authorization for one (1) Product Directed To Tau and one (1) Product Directed To [*], in each case, in [*]. Following receipt of Marketing Authorization in the applicable country, Genentech will use Commercially Reasonable Efforts to commercialize one (1) Product Directed To Tau and one (1) Product Directed To [*], in each case, in [*], one (1) [*]. Notwithstanding the foregoing, the Parties acknowledge and agree that subject to the terms and conditions of [*].

4.2 **Reporting**. Within [*] days after the beginning of each calendar year during the Term, Genentech will provide to Sangamo a written report summarizing Genentech's progress in the development of Products, including any material developments related to such Products achieved since the last such report. Genentech's obligations under this Section 4.2 will end (a) with respect to Products Directed To Tau, upon the First Commercial Sale of a Product Directed To Tau, and (b) with respect to Products Directed To [*], upon the First Commercial Sale of a Product Directed To [*].

4.3 **Alliance Manager**. On the Effective Date, each Party will designate an individual to act as the primary business contact for such Party for matters related to this Agreement (each, an "**Alliance Manager**"), unless another contact is expressly specified in the Agreement or designated by the Parties for a particular purpose. The Alliance Manager will promote communication and collaboration between the Parties and assist in the resolution of potential and pending issues and potential disputes in a timely manner. Either Party may replace its Alliance Manager at any time by notifying the other Party's Alliance Manager in writing (which may be by e-mail).

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4.4 **Pharmacovigilance**. Each Party will inform the other about any adverse events that are causally related to use of any Licensed Capsid of which such Party becomes aware. Sangamo will ensure that any Third Party to which Sangamo grants any right or license to Exploit the Licensed Capsids is required to inform Sangamo about any adverse events that are causally related to use of any Licensed Capsid of which such Third Party becomes aware. The Parties will handle data and information about such adverse events according to the regulatory guidelines of the applicable Regulatory Authority. If Genentech determines it to be appropriate, the Parties will enter into a pharmacovigilance or safety data exchange agreement concerning the procedures and timeframes for reporting safety information related to the Licensed Capsid or Product.

ARTICLE 5 Licenses

5.1 **Co-Exclusive Research License to Genentech**. Sangamo hereby grants to Genentech a worldwide, co-exclusive (with Sangamo) right and license under the [*] solely to perform the [*]. The foregoing license will expire upon the earlier of: (a) [*] in accordance with Section 3.1.3 and (b) the expiration of the first-to-expire of the: (i) [*] and (ii) [*]. For clarity, except as set forth in this Section 5.1, Section 5.2 and ARTICLE 6, nothing in this Agreement prohibits Sangamo from Exploiting any STAC-BBB [*] created under the [*] and controlled by Sangamo during the foregoing period or at any time during the Term.

5.2 **Exclusive License to Genentech.** Sangamo hereby grants to Genentech a worldwide, exclusive (even as to Sangamo) right and license, including the right to sublicense through multiple tiers (as set forth in Section 5.3), under the Licensed IP to Exploit Products Directed To Tau or [*], provided however, that the foregoing license will not include rights to (a) any Other Sangamo Capsid or Other Sangamo Payload; (b) any other active pharmaceutical agent or compound proprietary to Sangamo, [*].

5.3 **Sublicenses**. Genentech will have the right to grant sublicenses through multiple tiers under the license set forth in Section 5.2 to its Affiliates and to Third Parties, provided that such sublicenses are (a) subject to and consistent with the terms of this Agreement, including ARTICLE 5 and ARTICLE 9, and (b) Genentech (or its Affiliate) will remain responsible for the Sublicensee's compliance with the applicable provisions of this Agreement in connection with such performance. Genentech will provide Sangamo with written notice of any executed sublicense agreement with any such Sublicensee no later than [*] days after the execution thereof.

5.4 **Non-Exclusive License to Sangamo**. Subject to the licenses set forth in Sections 5.1 and 5.2 and the obligations set forth in ARTICLE 6, Genentech hereby grants to Sangamo a worldwide, non-exclusive, perpetual, royalty-free license (a) under the [*] solely to Exploit products comprising [*] and (b) under the [*] solely to Exploit products comprising [*]. For clarity, Genentech will not [*].

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) the type that the Registrant treats as private or confidential.

5.5 **No Additional Licenses.** Except as expressly provided in this Agreement, nothing in this Agreement will grant either Party any right, title or interest in and to the Know-How, Patents or other intellectual property rights of the other Party (either expressly or by implication or estoppel).

ARTICLE 6 Exclusivity

6.1 **[*]**. During the [*], to the extent permitted by Applicable Law, Sangamo will not, itself or through or with any of its Affiliates, directly or indirectly, (a) research, develop or commercialize any Capsid for use with any Payload Directed To [*], (b) research, develop or commercialize any zinc finger domain or other Payload Directed To [*], or (c) license, authorize, appoint or otherwise enable, any Third Party to conduct any of the activities described in the foregoing (a) or (b). For clarity, Sangamo will not be in breach of the foregoing obligations set forth in this Section 6.1 as a result of its conduct (itself or with or for a Third Party) of general research (i) with respect to any Payload that, at the time of such research, is not known to be Directed To [*], provided that such research is not designed to generate Payloads that are Directed To [*] or (ii) that is not designed to optimize a [*] specifically for use with any Payload Directed To [*].

6.2 **Tau**. During the Tau Exclusivity Period, to the extent permitted by Applicable Law, Sangamo will not, itself or through or with any of its Affiliates, directly or indirectly, (a) research, develop or commercialize any Capsid for use with any Payload Directed To Tau, (b) research, develop or commercialize any zinc finger domain or other Payload Directed To Tau, or (c) license, authorize, appoint or otherwise enable, any Third Party to conduct any of the activities described in the foregoing (a) or (b). For clarity, Sangamo will not be in breach of the foregoing obligations set forth in this Section 6.2 as a result of its conduct (itself or with or for a Third Party) of general research (i) with respect to any Payload that, at the time of such research, is not known to be Directed To Tau, provided that such research is not designed to generate Payloads that are Directed To Tau or (ii) that is not designed to optimize a [*] specifically for use with any Payload Directed to Tau.

6.3 **Exceptions**. If a Third Party becomes an Affiliate of Sangamo after the Effective Date (each, an "**Acquisition Affiliate**") and as of the closing date of the transaction in which such Acquisition Affiliate becomes an Affiliate of Sangamo, such Acquisition Affiliate is engaged in activities that, if conducted by Sangamo would cause Sangamo to be in breach of the obligations set forth in Sections 6.1 or 6.2 (such activities of the Acquisition Affiliate, a "**Competing Program**"), then:

6.3.1 if such transaction (a) constitutes a Change in Control of Sangamo or (b) constitutes the acquisition of a Third Party by an Acquirer after a Change in Control of Sangamo, then such Acquisition Affiliate may continue such Competing Program after such Change in Control and such continuation will not constitute a breach of Sangamo's exclusivity obligations set forth in Sections 6.1 or 6.2, provided that such Acquisition Affiliate conducts such Competing Program independently of the activities of this Agreement (including ensuring that no personnel involved in the Competing Program have

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access to (i) non-public plans or information relating to the development or commercialization of Products or (ii) Confidential Information of Genentech, in each case of (i) and (ii), except for senior management personnel reviewing and evaluating such plans and information in connection with portfolio decision-making, provided that such senior management personnel are not involved in day-to-day activities for such Competing Program and do not conduct any drug discovery or optimization work for such Competing Program, and segregating all personnel (other than such senior management personnel) conducting activities related to this Agreement from all personnel conducting the Competing Program) and does not use any of the Licensed IP or Sangamo's proprietary technology *] and

6.3.2 if such transaction does not result in a Change in Control of Sangamo, then Sangamo and such Acquisition Affiliate will have [*] from the closing date of such transaction to wind down or complete the Divestiture of such Competing Program and will cease all activities with respect to such Competing Program if it has not completed such Divestiture within such period (it being understood that Sangamo and such Acquisition Affiliate may thereafter continue its efforts to complete Divestiture), and such Acquisition Affiliate's conduct of such Competing Program during such [*]period will not be deemed a breach of the exclusivity obligations set forth in Sections 6.1 or 6.2; provided that such Acquisition Affiliate conducts such Competing Program during such [*] period independently of the activities of this Agreement (including ensuring that no personnel involved in the Competing Program have access to (i) non-public plans or information relating to the development or commercialization of Products or (ii) Confidential Information of Genentech, in each case of (i) and (ii), except for Sangamo's senior management personnel reviewing and evaluating such plans and information in connection with portfolio decision-making, provided that such senior management personnel are not involved in day-to-day activities for such Competing Program and do not conduct any drug discovery or optimization work for such Competing Program and segregating all personnel (other than such senior management personnel) conducting activities related to this Agreement from all personnel conducting the Competing Program) and does not use any of the Licensed IP or Sangamo's proprietary technology or Genentech's Confidential Information in the conduct of such Competing Program. "**Divestiture**", as used in this Section 6.3, means the sale or transfer of all rights to the Competing Program, as applicable, to a Third Party.

6.3.3 For clarity, Section 6.3.1 (and not Section 6.3.2) will apply to any Third Party that becomes an Affiliate of an Acquirer after a Change in Control of Sangamo.

ARTICLE 7 Financial Terms

7.1 **Upfront Payment**. In consideration of the rights and licenses set forth herein, Genentech will pay to Sangamo a one-time upfront payment of forty million dollars ($40,000,000) no later than [*] after the Effective Date and Genentech's receipt of an invoice therefor.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) the type that the Registrant treats as private or confidential.

7.2 **Technology Transfer Completion**. Genentech will pay to Sangamo ten million dollars ($10,000,000) no later than [*] after the Tech Transfer Completion Date and Genentech's receipt of an invoice therefor.

7.3 **Development Milestones**. Genentech will pay Sangamo the milestone payment amounts set forth in the following table in accordance with Section 8.1 following the first achievement of the corresponding milestone event by or on behalf of Genentech, its Affiliate or its Sublicensee:

#	**Milestone Event**	**Milestone Payment Amount**
[*]		
1	[*]	[*]
[*]		
2	[*]	[*]
3	[*]	[*]
4	[*]	[*]
[*]		
5	[*]	[*]
6	[*]	[*]
7	[*]	[*]
[*]		
8	[*]	[*]
9	[*]	[*]
[*]		
10	[*]	[*]
11	[*]	[*]
12	[*]	[*]
[*]		
13	[*]	[*]
14	[*]	[*]
15	[*]	[*]

Each milestone payment specified in this Section 7.3 is payable [*]. For the avoidance of doubt, (a) [*], Genentech's cumulative obligation under this Section 7.3 will in no event exceed [*], (b) [*], (c) [*], and (d) [*]. [*].

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) the type that the Registrant treats as private or confidential.

7.4 **First Commercial Sale and Marketing Authorization Milestones**. Genentech will pay Sangamo the milestone payment amounts set forth in the following table in accordance with Section 8.1 following the first achievement of the corresponding milestone event by or on behalf of Genentech, its Affiliate or its Sublicensee:

#	**Milestone Event**	**Milestone Payment Amount**
[*]		
16	[*]	[*]
17	[*]	[*]
18	[*]	[*]
19	[*]	[*]
20	[*]	[*]
21	[*]	[*]
[*]		
22	[*]	[*]
23	[*]	[*]
24	[*]	[*]
25	[*]	[*]
26	[*]	[*]
27	[*]	[*]
[*]		
28	[*]	[*]
29	[*]	[*]
30	[*]	[*]
31	[*]	[*]
32	[*]	[*]
33	[*]	[*]
[*]		
34	[*]	[*]
35	[*]	[*]
36	[*]	[*]
37	[*]	[*]
38	[*]	[*]
39	[*]	[*]

Each milestone payment specified in this Section 7.4 is payable [*]. For the avoidance of doubt, (a) [*], (b) [*], (c) [*], and (d) [*]. [*].

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) the type that the Registrant treats as private or confidential.

7.5 **Skipped Milestones**. If a milestone payment listed in Column A of the following table (for purposes of this provision, a "**Payable Milestone**") becomes payable before the milestone payment listed in Column B of the same row of the following table (for purposes of this provision, a "**Skipped Milestone**") and such Skipped Milestone has not previously been paid, then such Skipped Milestone will become payable at the same time as such Payable Milestone. For clarity, the numbers listed in Column A and Column B of the following table correspond to the numbers listed in the left-most column of the tables in Sections 7.3 and 7.4.

Column A	**Column B**
[*]	[*]
[*]	[*]
[*]	[*]
[*]	[*]
[*]	[*]
[*]	[*]
[*]	[*]
[*]	[*]
[*]	[*]
[*]	[*]
[*]	[*]
[*]	[*]
[*]	[*]
[*]	[*]
[*]	[*]
[*]	[*]

7.6 **Annual Net Sales Milestones**. Genentech will pay Sangamo the milestone payments set forth in the following table in accordance with Section 8.1 following the first achievement of the corresponding milestone event by or on behalf of Genentech, its Affiliate or its Sublicensee:

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) the type that the Registrant treats as private or confidential.

Milestone Event	Milestone Payment Amount
[*]	
[*]	
[*]	[*]
[*]	[*]
[*]	[*]
[*]	[*]
[*]	[*]
[*]	
[*]	[*]
[*]	[*]
[*]	[*]
[*]	[*]
[*]	[*]
[*]	
[*]	
[*]	
[*]	[*]
[*]	[*]
[*]	[*]
[*]	[*]
[*]	[*]
[*]	
[*]	[*]
[*]	[*]
[*]	[*]
[*]	[*]
[*]	[*]

Each milestone payment specified in this Section 7.6 is payable [*]. For the avoidance of doubt, Genentech's cumulative obligation under this Section 7.6 for (a) [*], (b) [*], (c) [*] and (d) [*].

7.7 **Royalty Payments**. Subject to Section 7.8, during the applicable Royalty Term, Genentech will pay Sangamo, on a Product-by-Product and country-by-country basis, a royalty on Annual Net Sales of such Product in accordance with Section 8.2, at the following rates:

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Annual Net Sales	Royalty Rate
[*]	
[*]	[*]
[*]	[*]
[*]	[*]
[*]	[*]
[*]	
[*]	[*]
[*]	[*]
[*]	[*]
[*]	[*]

Upon expiration of the Royalty Term with respect to a Product in a country, the licenses in Section 5.2 will be fully paid-up, perpetual and irrevocable in respect of that Product in that country. No more than [*] under this Section 7.7 with respect to sales of any one particular Product. For the avoidance of doubt, [*].

7.8 **Payment Offsets and Reductions**.

7.8.1 **Third Party IP**.

(a) **Sangamo**.

(i) Sangamo will make all payments owed under any agreements entered into by Sangamo with Third Parties (A) prior to the Effective Date that relate to any Product or (B) if failure to enter into such agreement would result in Sangamo's breach of any representation, warranty or covenant set forth in Section 12.2.1.

(ii) With respect to any intellectual property controlled by Sangamo or its Affiliates pursuant to an agreement other than an agreement with a Third Party referred to in Section 7.8.1(a)(i), notwithstanding anything to the contrary in this Agreement but subject to the remainder of this Section 7.8.1(a)(ii), Sangamo or its Affiliates will not be deemed to Control such intellectual property for the purpose of this Agreement (and Genentech will not receive rights thereunder) unless Genentech agrees in writing to (A) comply with the applicable terms and conditions of such Third Party agreement, and (B) bear all payment obligations thereunder to the extent attributable to the grant of the sublicense to Genentech or the practice of such sublicense by Genentech, its Affiliates or its or their Sublicensees. With respect to the intellectual property described in the foregoing sentence, promptly after Sangamo first obtains access to such intellectual property, Sangamo will provide a description to Genentech thereof, including any payment obligations associated with Genentech obtaining a sublicense thereunder and any other obligations associated with receiving a sublicense under such intellectual property. If Genentech provides Sangamo with written notice that it agrees to comply with the applicable

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terms and conditions of such Third Party agreement and bear all payment obligations thereunder to the extent attributable to the grant of the sublicense to Genentech or the practice of such sublicense by Genentech, its Affiliates or its or their Sublicensees, then Sangamo or its Affiliate (as applicable) will be deemed to Control such intellectual property for the purpose of this Agreement (and Genentech will receive rights thereunder) and such intellectual property will automatically be included in the Licensed IP upon receipt of such notice.

(b) **Genentech**. In the event that Genentech (or its Affiliate or Sublicensee hereunder) acquires rights under any intellectual property from a Third Party that are necessary or reasonably useful for the manufacture, use, importation, offer for sale or sale of a Product (including any Third Party intellectual property controlled by Sangamo after the Effective Date and sublicensed to Genentech pursuant to Section 7.8.1(a)(ii)), Genentech may offset any royalty payments due and payable by Genentech to Sangamo pursuant to Section 7.7 in any calendar quarter for such Product by [*] of the amount of the payments paid by Genentech (or its Affiliates or Sublicensees) to such Third Party (or to Sangamo, as applicable) for such rights and to the extent attributable to such Product.

7.8.2 **No Valid Claim**. On a Product-by-Product and country-by-country basis, if during any portion of the Royalty Term for such Product in the country of sale of such Product, no Valid Claim Covers such Product in such country, then the royalty payments that would otherwise be owed and payable pursuant to Section 7.7 with respect to Annual Net Sales of such Product in such country will be reduced by [*].

7.8.3 **Competitive Products.** In any calendar quarter after the Launch Quarter in the applicable country, if the quarterly Net Sales of the applicable Product in such country is less than [*] of the average quarterly Net Sales such Product achieved in such country in the [*]. "**Launch Quarter**" means (a) [*] or (b) [*].

7.8.4 **Cumulative Reduction Floor**. The royalty reductions in Sections 7.8.1(b), 7.8.2, and 7.8.3 are cumulative, but in no event will the aggregate amount of royalties due to Sangamo for a Product during a calendar quarter be reduced, by reason of Sections 7.8.1(b), 7.8.2, and 7.8.3 to [*]. Genentech [*].

7.8.5 **[*]**

7.9 **[*]**

ARTICLE 8 Payment Terms, Reports, Audits

8.1 **Notice of Milestone Achievement; Timing of Milestone Payments**. With respect to each of the milestone events set forth in Sections 7.3 and 7.4, Genentech will inform Sangamo within [*]following the achievement of such event. With respect to each of the milestone events set forth in Section 7.6, Genentech will inform Sangamo within [*] following the end of the calendar quarter during which such achievement of such event occurred. Following such notice,

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Genentech will pay Sangamo the respective payable milestone payment within [*] of receipt of an invoice from Sangamo with respect thereto.

8.2 **Timing of Royalty Payments**. All royalty payments for a calendar quarter will be due [*] after the end of such calendar quarter.

8.3 **Royalty Reports**. For each calendar quarter for which Genentech has an obligation to make royalty payments pursuant to Section 7.7, such payments will be accompanied by a report that specifies for such calendar quarter the following information on a Product-by-Product basis:

8.3.1 the Sales and Net Sales in those countries where the Royalty Term is then in effect, provided that Net Sales will be specified on an aggregate and a country-by-country basis;

8.3.2 the applicable royalty rate(s) applied;

8.3.3 the total royalties due to Sangamo on such Net Sales;

8.3.4 any applicable royalty adjustments, reductions or offsets set forth herein; and

8.3.5 the total royalties due to Sangamo on such Net Sales after applying applicable, if any, adjustments, reductions and offsets as set forth herein, including a summary of the current exchange rate methodology used (if applicable).

8.4 **Invoicing.** Sangamo will send invoices under this Agreement to Genentech via e-mail to Genentech's Alliance Manager and at:

Alliance Manager, Pharma Partnering
Genentech, Inc.
One DNA Way, Mail Stop 53
South San Francisco, CA 94080

or to such other address as Genentech may designate from time to time.

8.5 **Mode of Payment**. All payments hereunder will (unless otherwise specifically set forth in this Agreement) be non-creditable and non-refundable. All payments to Sangamo hereunder will be made in immediately available funds to the account listed below (or such other account as Sangamo will designate before such payment is due):

Account Name:
Sangamo Therapeutics Inc
501 Canal Blvd Ste A100
Richmond CA 94804

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) the type that the Registrant treats as private or confidential.

Bank Details:
[*]

8.6 **Currency of Payments**. All amounts set forth herein (including all payments) will be in United States dollars, unless otherwise expressly provided in this Agreement. Net Sales outside of the United States will be first determined in the currency in which they are earned and will then be converted into an amount in United States dollars as follows: (a) with respect to Sales by or on behalf of Genentech or an Affiliate, using Genentech's or such Affiliate's customary and usual conversion procedures, consistently applied and (b) with respect to Sales by or on behalf of a given Sublicensee, using the conversion procedures applicable to payments by such Sublicensee to Genentech for such sales.

8.7 **Blocked Currency**. If, at any time, Applicable Law prevents Genentech (or an Affiliate or Sublicensee) from remitting part or all of any payments when due with respect to any country where a Product is sold, Genentech will continue to provide the reports set forth in Section 8.3 for such payments, and such payments will be deposited in local currency in the relevant country to the credit of Sangamo in a recognized banking institution designated by Sangamo and identified in a written notice given to Genentech.

8.8 **Taxes**. Sangamo will pay all income and revenue taxes levied on account of any payments accruing or made to Sangamo under this Agreement. Except as otherwise provided in this Section 8.8, any payments made under this Agreement are exclusive of any transfer taxes such as sales, use, transfer, documentary, stamp, registration, VAT, goods or service (GST), or similar tax (each, an "**Indirect Tax**"), which shall be added thereon as applicable. If any Indirect Tax is required with respect to the transactions, payments or the related transfer of rights or other property pursuant to the terms of this Agreement pursuant to Applicable Law, Genentech shall pay such Indirect Tax (and shall indemnify Sangamo for such Indirect Taxes) at the applicable rate with respect to any such payments following the receipt of a valid invoice. If provision is made in Applicable Law of any country for withholding of taxes of any type, levies or other charges with respect to any royalty or other amounts payable under this Agreement to Sangamo, then Genentech will promptly pay such tax, levy or charge for and on behalf of Sangamo to the proper governmental authority and will promptly furnish Sangamo with receipt of payment. Each Party agrees to reasonably assist the other Party in claiming exemption from such deductions or withholdings under double taxation or similar agreement or treaty from time to time in force and in minimizing the amount required to be so withheld or deducted. Notwithstanding the foregoing, if an action taken by Genentech after the Effective Date (including any assignment of this Agreement, any sublicense of its rights or obligations under this Agreement, any transfer of payment obligations hereunder, or a change in tax residency of Genentech) leads to the imposition of withholding tax liability on payment to Sangamo that would not have been imposed in the absence of such action or an increase in such liability above the liability that would have been imposed in the absence of such action, then the sum payable by Genentech (with respect to which such deduction or withholding is required to be made) shall be increased to the extent necessary to ensure that Sangamo receives a sum equal to the sum it would have received had no such action occurred. Any payments due to Sangamo pursuant to

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this Section 8.8 shall promptly be paid by Genentech within [*] of receipt of an invoice from Sangamo with respect thereto.

8.9 **Records; Inspection**.

8.9.1 **Records**. Genentech agrees to keep, for [*] from the end of the year of creation, records of all sales of Products for each reporting period in which royalty payments are due, showing sales of Products for Genentech and applicable deductions in sufficient detail to enable the reports provided under Section 8.3 to be verified.

8.9.2 **Audits**. Sangamo will have the right to request that royalty reports provided under Section 8.3 be verified by an independent, certified and internationally recognized public accounting firm selected by Sangamo and reasonably acceptable to Genentech (the "**CPA Firm**"). Such right to request a verified report will (a) be limited to the [*] period during which Genentech is required to maintain the same pursuant to Section 8.9.1, (b) not be exercised more than once in any calendar year, and (c) not be exercised more than once with respect to records covering any specific period of time. Subject to Section 8.9.3, Genentech will, upon reasonable advance notice and at a mutually agreeable time during its regular business hours, make its records available for inspection by such CPA Firm at such place or places where such records are customarily kept, solely to verify the accuracy of such applicable royalty report(s) and related payments due under this Agreement. The CPA Firm will only state factual findings in the audit reports. The CPA Firm will share all draft audit reports with Genentech before any such draft audit report is shared with Sangamo and before the final document is issued. All final audit reports will be shared with Genentech at the same time that the applicable report is shared with Sangamo.

8.9.3 **Confidentiality**. Prior to any audit under Section 8.9.2, the CPA Firm will enter into a written confidentiality agreement with Genentech that (a) limits the CPA Firm's use of the Genentech's records to the verification purpose described in Section 8.9.2; (b) limits the information that the CPA Firm may disclose to Sangamo to the numerical summary of payments due and paid; and (c) prohibits the disclosure of any information contained in such records to any Third Party for any purpose. The Parties agree that all information subject to review under Section 8.9.2 or provided by the CPA Firm to Sangamo is Genentech's Confidential Information, and Sangamo will not use any such information for any purpose that is not germane to Section 8.9.2.

8.9.4 **Underpayment; Overpayment**. After reviewing the CPA Firm's final audit report, Genentech will promptly pay any uncontested, understated amounts due to Sangamo. Any overpayment made by Genentech will be promptly refunded or fully creditable against amounts payable in subsequent payment periods, at Genentech's election. Any audit under Section 8.9.2 will be at Sangamo's expense; provided, however, Genentech will reimburse reasonable audit fees for a given audit if the results of such audit

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reveal that Genentech underpaid Sangamo with respect to royalty payments by [*] or more for the audited period.

8.10 **Late Payments**. If any payment due to either Party under this Agreement is not paid when due, then such paying Party will pay interest thereon (before and after any judgment) at an annual rate (but with interest accruing on a daily basis) of [*] (or such other interbank rate acceptable to both Parties), such interest to run from the date on which payment of such sum became due until payment thereof in full together with such interest.

ARTICLE 9 Intellectual Property

9.1 **Disclosures of IP**. During the Term, Genentech will promptly disclose to Sangamo any [*] of which Genentech becomes aware. Until completion of the [*], Sangamo will promptly disclose to Genentech any [*], or [*], of which it becomes aware. During the Term, each Party will promptly disclose to the other Party any Joint IP of which it becomes aware.

9.2 **IP Committee**. Within thirty (30) days following the Effective Date, the Parties will establish a joint intellectual property committee (the "**IP Committee**") comprised of at least one patent attorney from each Party (which may include outside counsel). The IP Committee will (a) meet on a quarterly basis (unless the Parties agree on alternate timing) during the Term to coordinate strategic matters related to [*], (b) [*], and (c) [*]. If the IP Committee [*].

9.3 **Ownership**. The determination of whether inventions, discoveries, creations, or works are conceived, reduced to practice or otherwise invented by or on behalf of a Party for purposes of allocating intellectual property rights therein will, for purposes of this Agreement, be made in accordance with the United States patent and copyright laws and other Applicable Laws in the United States.

9.3.1 **Pre-Existing IP and IP Developed Outside Agreement**. Each Party will continue to own any Patents and Know-How that it owned prior to the Effective Date or that it creates or obtains independently of this Agreement.

9.3.2 **IP Developed under Agreement**. Subject to ARTICLE 5, (a) Sangamo will own (i) [*] and (ii) [*], and (b) as between the Parties, ownership of all other inventions, discoveries, creations and works, including Know-How, compositions of matter, articles of manufacture or other subject matter, whether patentable or copyrightable or not, that are first conceived, reduced to practice or otherwise invented in the performance of this Agreement by or on behalf of one or both Parties (and the intellectual property rights therein) will be determined based on inventorship. Notwithstanding Section 10.2.1, [*].

9.4 **Assignment and Cooperation**. The assignments necessary to accomplish the ownership provisions set forth in Section 9.3 are hereby made, and each Party will execute such further documentation as may be necessary or appropriate and provide reasonable assistance and cooperation to implement the provisions of Section 9.3. Without limiting the foregoing, each

Party agrees to execute such documents, render such assistance, and take such other action as the other Party may reasonably request, to apply for, register, perfect, confirm, and protect the other Party's rights in such intellectual property rights (including Patents and Know-How) therein to effect the intent of Section 9.3. Each Party will require, to the extent legally possible under relevant national or local laws, all of its employees, Affiliates and subcontractors to assign to such Party its right, title and interests in any Patents and Know-How conceived, reduced to practice or otherwise invented by such employee, Affiliate or subcontractor (or if assignment is not possible, to otherwise convey rights) and to cooperate with such Party in connection with obtaining Patent protection therefor.

9.5 **Joint IP**. Subject to ARTICLE 5, ARTICLE 6, and ARTICLE 10, each Party has the right to practice, license, sublicense, assign, transfer and otherwise exploit such Party's interest in the Joint IP (including Patents therein) for any and all purposes on a worldwide basis, without restriction, and without the consent of, and without a duty of accounting to, the other Party. Each Party will grant and hereby does grant all permissions, consents and waivers with respect to, and all licenses under, such Party's interest in the Joint IP, throughout the world, necessary to provide the other Party with the foregoing rights.

9.6 **Prosecution and Maintenance**.

9.6.1 **Control**.

(a) **Licensed Payload Patents and Licensed Product Patents**. As between the Parties, [*]. [*].

(b) **Licensed Capsid Patents**. Sangamo will, at its expense, Prosecute and Maintain the Licensed Capsid Patents [*].

(c) **Patents within Joint IP**. Except as set forth in Sections 9.6.1(a) and 9.6.1(b), each Party will, at its expense, have the right to control Prosecution and Maintenance of Patents within the Joint IP by providing notice thereof to the other Party, provided that if both Parties desire to control Prosecution and Maintenance for any Patent(s) within the Joint IP, Genentech, at its expense, will have the first right to Prosecute and Maintain such Patent(s). If a Party decides not to Prosecute and Maintain any Patent within the Joint IP that it has the right to Prosecute and Maintain pursuant to this Section 9.6.1(c), such Party will notify the other Party at least forty-five (45) days prior to any relevant deadline or filing or response date, and the other Party will thereupon have the right, but not the obligation, to assume the Prosecution and Maintenance of such Patent at its expense.

(d) **Other Patents within Licensed IP**. As between the Parties, except as set forth in Sections 9.6.1(a), 9.6.1(b) and 9.6.1(c), Sangamo will, at its expense, have the right to control and make decisions with respect to Prosecution and Maintenance of Patents within the Licensed IP.

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9.6.2 **Further Acts**. At the requesting Party's expense, each Party will reasonably cooperate with and assist the other in the Prosecution and Maintenance of Patents within the Licensed IP and Joint IP, including making scientists and scientific records reasonably available and using its reasonable efforts to have documents signed as necessary in connection with such Prosecution and Maintenance.

9.6.3 **Patent Term Restoration**. As between the Parties, with respect to each Product, [*].

9.6.4 **German Statute on Employee Inventions**. With respect to any inventions arising under this Agreement that are within the scope of the German Statute on Employee's Inventions, each Party will claim the unlimited use of any such inventions. Each Party will be responsible for its own compliance with the German Statute on Employee's Inventions.

9.6.5 **Trademarks**. Genentech will have the sole right to determine and own all Trademarks used on or in connection with a Product (each, a "**Product Trademark**") and will, at its sole expense and discretion, procure, maintain, enforce, and defend any such Product Trademarks. [*].

9.7 **Enforcement; Challenges; Defense of Third Party Infringement Claims.**

9.7.1 **Notice.** Each Party will promptly notify the other Party upon learning of any (a) actual or suspected infringement or misappropriation by a Third Party of any Patent within the Licensed IP or Joint IP arising from the exploitation of a product that is Directed To the same Target as a Product and competitive with such Product (each, an "**Infringement**") or (b) claim by a Third Party that is developing or commercializing any therapeutic product Directed To the same Target as a Product alleging invalidity, unpatentability (including any Third Party-filed observations, reexaminations, inter partes reviews, and post grant reviews, as well as interferences and derivation proceedings, oppositions and other similar proceedings brought by a Third Party), unenforceability or non-infringement (or non-misappropriation) of any Patent within the Licensed IP or Joint IP that claims a Product (or a component thereof) or the composition of matter, method of use, or method of making the Product (or a component thereof) (each, a "**Challenge**"). Any certification, notice of allegation, declaration, or similar notice pursuant to a patent listing or patent linkage regulation under Applicable Law or any notice of filing of an abbreviated new drug application or biosimilar application, notice of commercial marketing, or similar notice pursuant to regulations under Applicable Law, in either case, received by either Party from a Third Party for a Product will be deemed an Infringement of the applicable Patent(s).

9.7.2 **Enforcement**.

(a) **Control**.

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(i) **Generally**. As between the Parties, (A) [*], and (B) [*], at its sole expense, and to enter into, or permit, the settlement of any such litigation or other enforcement or defense action with respect to any such Infringement.

(ii) **Licensed Capsid Patents**. Promptly following receipt of any notice regarding Infringement of a Licensed Capsid Patent, the Parties will meet to discuss the appropriate course of action to enforce, defend or otherwise abate such Infringement [*]. Sangamo will have the sole right, but not the obligation, to determine the appropriate course of action, and to take (or otherwise refrain from taking) action to enforce, defend, or control such litigation or other enforcement or defense action with respect to such Infringement, will keep Genentech fully informed of any actions it is taking (or refraining from taking) [*]. If Sangamo elects to not take any steps to abate an Infringement of a Licensed Capsid Patent, Sangamo agrees to notify Genentech. [*].

(b) **Cooperation**. In any action under Section 9.7.2, the non-controlling Party will cooperate with the Party controlling any such action (as may be reasonably requested by the controlling Party) at the controlling Party's expense, including, if necessary, by being joined as a party and the Party controlling any such action will keep the other Party regularly updated and informed with respect to any such action, including providing copies of material documents received or filed in connection with any such action.

(c) **Settlement**. Notwithstanding anything to the contrary in Section 9.7.2(a), the Party controlling any action described in Section 9.7.2 will not settle or consent to an adverse judgment without the express consent of the non-controlling Party (such consent not to be unreasonably withheld or delayed), [*].

(d) **Damages**. [*]

9.7.3 **Challenges**.

(a) **Control**.

(i) **Generally. [*]**.

(ii) **Licensed Capsid Patents.** [*].

(b) **Settlement**. [*].

(c) **Counterclaims**. Notwithstanding the foregoing in Section 9.7.3, Section 9.7.3(a) will govern the rights and obligations of the Parties with respect to any counterclaim brought in response to an action to abate an Infringement.

9.7.4 **Defense of Third Party Infringement Claims**. In the event that a claim is brought against either Party alleging the infringement, violation or misappropriation of any Third Party's intellectual property right based on the Exploitation of any Product(s), the

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Parties will promptly meet to discuss the defense of such claim, and the Parties will, as appropriate, enter into a joint defense agreement with respect to the common interest privilege protecting communications regarding such claim in a form reasonably acceptable to the Parties.

9.7.5 **Common Interest Disclosures**. With regard to any information or opinions disclosed pursuant to this Agreement by one Party to the other Party regarding intellectual property or technology owned by Third Parties, the Parties agree that they have a common legal interest in determining whether, and to what extent, Third Party intellectual property rights may affect the Products, and have a further common legal interest in defending against any actual or prospective Third Party claims based on allegations of misuse or infringement of intellectual property rights relating to the Products. [*].

ARTICLE 10 Confidentiality

10.1 **Definition of Confidential Information**. "**Confidential Information**" of a Party means the confidential or proprietary information (of whatever kind and in whatever form or medium, including copies thereof) disclosed in any form (whether written, oral, electronic, photographic or otherwise) by or on behalf of such Party ("**Disclosing Party**") to, or otherwise accessed by, the other Party (the "**Receiving Party**") in connection with this Agreement, whether prior to or during the Term, including Know-How or other information (whether or not patentable) regarding such Party's research, development plans, designs of Trials, preclinical and clinical data, technology, products, business information or objectives, reports, and audits and other information of the type that is customarily considered to be confidential or proprietary information by entities engaged in activities that are substantially similar to the activities being engaged in by the Parties pursuant to this Agreement, including all proprietary materials as well as data and information associated therewith. Notwithstanding the foregoing and Sections 10.2.1 and 10.2.5, but subject to the exclusions set forth in Sections 10.2.2 through 10.2.4 and 10.2.6, (a) the terms of this Agreement (including the Targets hereunder) will be the Confidential Information of both Parties, (b) during the Term, [*], and (c) [*].

10.2 **Exclusions Regarding Confidential Information**. Notwithstanding anything to the contrary in Section 10.1, Confidential Information of the Disclosing Party will not include information that the Receiving Party can demonstrate with competent written records:

10.2.1 was already known to the Receiving Party, other than under an obligation of confidentiality, at the time of receipt by the Receiving Party;

10.2.2 was generally available to the public or otherwise part of the public domain at the time of its receipt by the Receiving Party;

10.2.3 became generally available to the public or otherwise part of the public domain after its receipt by the Receiving Party other than through any act or omission of such Receiving Party in breach of this Agreement;

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10.2.4 was received by the Receiving Party without an obligation of confidentiality and non-use from a Third Party, who had no obligation of confidentiality and non-use regarding such information;

10.2.5 was independently developed by or for the Receiving Party without use of or reference to the Confidential Information of the Disclosing Party; or

10.2.6 was released from the restrictions set forth in this ARTICLE 10 by express prior written consent of the Disclosing Party.

10.2.7 Specific aspects or details of Confidential Information will not be deemed to be within the public domain or in the possession of the Receiving Party merely because the Confidential Information is embraced by more general information in the public domain or in the possession of the Receiving Party. Further, any combination of Confidential Information will not be considered in the public domain or in the possession of the Receiving Party merely because individual elements of such Confidential Information are in the public domain or in the possession of the Receiving Party unless the combination and its principles are in the public domain or in the possession of the Receiving Party.

10.3 **Non-Use and Non-Disclosure of Confidential Information**. During the Term, and for a period of [*] thereafter, a Party will (a) except to the extent expressly permitted by this Agreement or otherwise agreed to in writing, keep confidential and not disclose to any Third Party or use for any other purpose any Confidential Information of the other Party; and (b) take reasonable precautions to protect the Confidential Information of the other Party from unauthorized use or disclosure (including all precautions a Party employs with respect to its own confidential information of a similar nature and taking reasonable precautions designed to assure that no unauthorized use or disclosure is made by others to whom access to the Confidential Information of the Party is granted). [*].

10.4 **Authorized Disclosures of Confidential Information**. A Receiving Party may use and disclose the Confidential Information of the Disclosing Party as follows:

10.4.1 to the extent required by Applicable Law provided that the Receiving Party (a) if permitted by Applicable Law, uses all reasonable efforts to inform the Disclosing Party prior to making any such disclosures and reasonably cooperates with the Disclosing Party in seeking a protective order or other appropriate remedy (including redaction) and (b) whenever possible, requests confidential treatment of such Confidential Information;

10.4.2 as necessary or reasonably useful to exercise its rights or fulfill its obligations under this Agreement;

10.4.3 to the extent such use and disclosure is reasonably required in the Prosecution and Maintenance of a Patent claiming or describing any Know-How within the Licensed IP in accordance with this Agreement;

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10.4.4 as reasonably necessary to obtain or maintain any Regulatory Approval, including to conduct preclinical studies and Trials, consult with Regulatory Authorities for guidance and feedback, and for pricing approvals, for any Product, provided, that, the Receiving Party will take all reasonable steps to limit disclosure of the Confidential Information outside such Regulatory Authority and to otherwise maintain the confidentiality of the Confidential Information; or

10.4.5 to the extent necessary, to its board members, Sublicensees, collaborators, vendors, consultants, agents, attorneys, accountants, contractors and clinicians under written agreements of confidentiality at least as restrictive as those set forth in this Agreement and who have a need to know such information in connection with the Receiving Party performing its obligations, exercising its licenses or other rights under this Agreement or as required under Applicable Law. Further, the Receiving Party may disclose Confidential Information to existing or bona fide potential acquirers, merger partners, permitted collaborators, sublicensees and sources of financing or to professional advisors (e.g. attorneys, accountants and prospective investment bankers) for the limited purpose of evaluating a transaction, collaboration or sublicense with the Receiving Party, provided that such disclosures are limited to only such information that is strictly necessary for such purpose and are made under a written agreement by those permitted individuals to maintain such Confidential Information in strict confidence. Each Receiving Party will remain liable for the breach of this Agreement by the permitted recipients in this Section 10.4.5 as if such breach were by the Receiving Party itself.

Notwithstanding the foregoing, Sections 10.4.2 through 10.4.5 [*].

10.5 **Termination of Prior Agreements**. As of the Effective Date, as between the Parties, this Agreement supersedes the Non-Disclosure Agreement. Disclosures of Confidential Information (as defined in the Non-Disclosure Agreement) made prior to the Effective Date pursuant to the Non-Disclosure Agreement will be subject to the provisions of this ARTICLE 10 and such Confidential Information will be treated as the Confidential Information of the Party that disclosed such information pursuant to such prior Non-Disclosure Agreement. Each Party will remain liable for its breach, if any, of the Non-Disclosure Agreement that occurred prior to the Effective Date.

10.6 **Residuals**. Notwithstanding anything to the contrary herein, except for [*] and is not subject to the exclusions set forth in Sections 10.2.2 through 10.2.6, and subject to ARTICLE 6, each Party and its Affiliates may use Residuals for any and all research purposes. "**Residuals**" means Know-How or other Confidential Information of a Disclosing Party that is retained in the unaided memory of a Receiving Party's (or any of its Affiliate's) employees, consultants, or agents.

10.7 **No License**. As between the Parties, Confidential Information disclosed hereunder will remain the property of the Disclosing Party, except as expressly set forth in this Agreement. Disclosure of Confidential Information to the other Party will not constitute any grant, option or

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license to the other Party, beyond those licenses expressly granted under Sections 5.1, 5.2, and 5.4 under any Patent, Know-How, or other rights now or hereinafter held by the Disclosing Party.

10.8 **Information Security Incident**.

10.8.1 **Notification**. A Party will provide to the other Party written notice within [*] of such Party's confirmation of any unauthorized use, unauthorized disclosure, corruption (including ransomware attack), or loss or other misuse of, or unauthorized access to, with respect to the other Party's Confidential Information (each such incident, an "**Information Security Incident**"). Information Security Incidents will not include unsuccessful attempts or activities that do not compromise the security of the applicable Confidential Information, including unsuccessful log-in attempts, pings, port scans, denial of service attacks, or other network attacks on firewalls or networked systems. Such notice will describe in reasonable detail the Information Security Incident, including the other Party's Confidential Information impacted, the extent of such impact and any corrective action taken or to be taken by such Party. In addition, if a Party reasonably suspects (even if it has not confirmed) that an actual or attempted Information Security Incident has occurred with respect to the other Party's Confidential Information, then such Party will promptly notify the other Party of such suspected actual or attempted Information Security Incident.

10.8.2 **Non-Disclosure**. Except to the extent required by Applicable Law, neither Party will disclose any information related to an actual or suspected Information Security Incident of the other Party's Confidential Information to any Third Party without the other Party's prior written consent.

ARTICLE 11 Press Releases and Publications

11.1 **Initial Press Release**. Following the Effective Date, Sangamo may issue a press release concerning the execution of this Agreement in the form attached hereto as Exhibit 11.1. Any response to media inquiries or inquiries by Third Parties after issuance of the initial press release will consist solely of the content of the initial press release or conform with response guidelines mutually agreed to by the Parties prior to any such response.

11.2 **Subsequent Releases**. Following the initial press release by Sangamo announcing the Agreement described in Section 11.1, (a) Genentech may issue press releases, presentations, interviews, campaigns, or other public announcements concerning this Agreement, the subject matter hereof, or the research, development, manufacturing or commercial results of the Licensed Payloads or Products hereunder (a "**Release**"), without Sangamo's prior written consent, unless such Release includes reference to Sangamo by name or discloses Sangamo's Confidential Information, and (b) except as permitted under Section 11.3 or 11.4, Sangamo may not issue any Release, without Genentech's prior written consent, provided that Sangamo may, without Genentech's prior written consent, issue any Release that (i) relates to the Licensed

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Capsids or Sangamo's proprietary platform technologies (including the AAV capsid discovery platform referred to as SIFTER, modular integrase technology referred to as MINT and zinc finger technologies generally that do not specifically relate to a Licensed Payload) and (ii) does not specifically relate to a Target, Licensed Payload or a Product. For any Release that requires consent of the other Party, the issuing Party will provide a draft of such Release to the other Party for its review at least [*] prior to the intended date of issuance of such Release. For any Release that does not require consent of the other Party (including any Release permitted under Section 11.3), the issuing Party will provide notice of such Release to the other Party reasonably prior to the intended date of issuance of such Release or, if prior notice is impracticable, soon after such issuance.

11.3 **Approved Releases**. If a Release requires consent pursuant to Section 11.2, after consent has been given, either Party may make subsequent public disclosure of the contents of such Release (or the Release issued pursuant to Section 11.1) without the further approval of the other Party, provided that such information remains accurate as of such time and is not presented with any new data or information or conclusions or in a form or manner that materially alters the subject matter therein or would be misleading.

11.4 **Releases Required by Applicable Law**. Each Party may issue any Release it is required to issue by Applicable Law, provided that if Applicable Law requires the issuing Party to disclose any of the other Party's Confidential Information in such Release, the Party issuing such Release will (a) to the extent permitted by Applicable Law, use reasonable efforts to inform the other Party no less than [*] prior to making any such Release to permit such other Party the opportunity to seek to obtain a protective order or other confidential treatment preventing or limiting the required disclosure, and (b) disclose only such Confidential Information of the other Party that it is advised by counsel is legally required to be disclosed in such Release. To the extent such other Party seeks to obtain a protective order or other confidential treatment to prevent or limit the required disclosure, the issuing Party will reasonably assist such other Party (unless prohibited by Applicable Law), but will not be required to delay such Release beyond the requirements of Applicable Law.

11.5 **Filing of Agreement**. A Party may disclose this Agreement in securities filings with the US Securities Exchange Commission or equivalent foreign agency to the extent required by Applicable Law (including relevant rules of a security exchange on which the securities of the filing Party or its Affiliate are listed). In such event, the filing Party will, at the request of the other Party, seek confidential treatment of portions of this Agreement from the applicable governmental agency and will provide such other Party with the opportunity, for no less than [*] before the date of the proposed filing, to review and comment on any such proposed filing of this Agreement, and will thereafter provide reasonable advance notice and opportunity for comment on any subsequent changes to such filing. [*].

11.6 **Publications**. Genentech, its Affiliates, and its and their Sublicensees will have the right, without Sangamo's review or consent, to publish or disclose papers, abstracts, or written or oral presentations regarding activities under this Agreement (each, a "**Publication**"). Notwithstanding

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the foregoing, with respect to any Publication by Genentech, its Affiliates, or its or their Sublicensees that includes Product Information that is then Confidential Information or Sangamo's Confidential Information, Genentech will submit to Sangamo such proposed Publication at least [*] ([*] for abstracts) prior to the date of submission for publication or the date of presentation, as applicable, and Sangamo may review such Product Information and Sangamo's Confidential Information in such proposed Publication and respond to Genentech as soon as reasonably possible, but in any case, within [*] ([*] for abstracts) of receipt thereof. If Sangamo fails to respond within the time limits specified in this Section 11.6, such proposed Publication will be deemed approved. As requested by Sangamo within the time limits specified in this Section 11.6, Genentech will (a) delete from such proposed Publication any of Sangamo's Confidential Information or (b) delay the date of such submission for publication or the date of such presentation, as applicable, for a period of time sufficiently long (but in no event longer than [*] to permit Sangamo to seek appropriate Patent protection of its rights in the Confidential Information to be disclosed therein. After a Publication of Product Information or Sangamo Confidential Information has been approved by Sangamo or deemed approved, Genentech may make subsequent public disclosure of the contents of such Publication without the further review or approval of Sangamo. Except as expressly permitted by this Agreement, Sangamo and its Affiliates will not make any Publication or other public disclosures regarding any Licensed Payload, Product controlled by Genentech, Product Information or any other Genentech Confidential Information without Genentech's prior written consent.

11.7 **Use of Names**. Except as expressly provided herein and to the extent that such use is not inconsistent with prior public disclosures or presentations, no right, express or implied, is granted by this Agreement to use in any manner the name of a Party or its Affiliates (i.e., "Sangamo" or "Genentech" or "Roche", as applicable) or any Trademark of the other Party in connection with the performance of this Agreement, except to the extent required by Applicable Law. Notwithstanding the foregoing, Sangamo will be permitted to include the name or Genentech-approved version of Genentech's corporate logo in connection with the description of this Agreement on Sangamo's corporate website and investor presentations, in each case, solely for the purpose of identifying Genentech as a licensee and subject to Genentech's review and approval (not to be unreasonably withheld or delayed) that Sangamo's proposed use complies with Genentech's written branding guidelines with respect to the use of such name, trademark or logo and such use only contains accurate and non-misleading factual statements regarding the Parties' relationship. Genentech may reasonably request from time to time samples of the documents or other materials, or screen shots of the websites, containing Sangamo's use of Genentech's name, trademarks or logo to ensure compliance with Genentech's written branding guidelines and the terms of this Section 11.7, and Sangamo will promptly comply with such reasonable requests.

ARTICLE 12 Representations, Warranties and Covenants

12.1 **Mutual Representations, Warranties, and Covenants**. Each Party represents, warrants, and covenants, as applicable, to the other Party the following:

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) the type that the Registrant treats as private or confidential.

12.1.1 **Authority**. It is duly organized, validly existing and in good standing under the laws of the jurisdiction of its formation and has full corporate power and authority to enter into this Agreement and to carry out the provisions hereof.

12.1.2 **Enforceability**. This Agreement has been duly executed and delivered on behalf of such Party and constitutes a legal, valid, binding obligation, enforceable against it in accordance with its terms, except to the extent that enforcement of the rights and remedies created hereby is subject to (a) bankruptcy, insolvency, reorganization, moratorium and other similar laws of general application affecting the rights and remedies of creditors, or (b) laws governing specific performance, injunctive relief and other equitable remedies.

12.1.3 **No Conflict**. The execution, delivery and performance of this Agreement and all instruments and documents to be delivered by such Party hereunder (a) does not conflict with any agreement or any provision thereof, or any instrument or understanding, oral or written, to which it is a party or by which it is bound, nor violate any Applicable Law of any governmental authority having jurisdiction over such Party, (b) have been duly authorized by all necessary or proper corporate action, (c) are not in contravention of any provision of the organizational documents of such Party, and (d) to the knowledge of such Party, will not violate Applicable Law or any order or decree of any court of governmental instrumentality.

12.1.4 **Protection of Confidential Information**. It follows reasonable commercial practices common in the industry to protect its proprietary and confidential information, including requiring its officers, employees, contractors, consultants, and agents to be bound in writing by obligations of confidentiality and non-disclosure, and requiring its officers, employees, contractors, consultants, and agents to assign to it any and all inventions, discoveries, creations or works conceived, reduced to practice or otherwise invented by such officers, employees, contractors, consultants, or agents within the scope of and during their employment or in the course of providing services for such Party, as applicable, and only disclosing proprietary and confidential information to Third Parties pursuant to written confidential and non-disclosure agreements.

12.1.5 **Compliance with Applicable Law**. In fulfilling its obligations under this Agreement, it will comply with all Applicable Law.

12.1.6 **No Debarment**. Neither such Party nor any of its Affiliates have used or will use in any capacity, in connection with the preclinical or clinical development activities performed or to be performed under this Agreement, any individual or entity that has been debarred pursuant to Section 306 of the US Federal Food, Drug, and Cosmetic Act, or who is the subject of a conviction described in such section. Such Party agrees to inform the other Party in writing immediately if it becomes aware that it or any individual or entity that is performing any such activity by or on behalf of such Party hereunder is debarred or is the subject of a conviction described in Section 306, or if any action, suit,

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claim, investigation, or legal or administrative proceeding is pending or is threatened in writing, relating to the debarment or conviction of such Party or any individual or entity that is performing any such activity by or on behalf of such Party hereunder.

12.2 **Sangamo Representations, Warranties, and Covenants**. Sangamo, on behalf of itself and each of its Affiliates, hereby represents and warrants to Genentech, as of the Effective Date, and covenants, as applicable, the following:

12.2.1 **Intellectual Property**

(a) **Complete Lists**. [*]

(b) **Right to Grant Licenses**. Sangamo has the lawful right and authority to grant the licenses set forth in Sections 5.1 and 5.2. Sangamo has not granted, and will not grant during the Term, any right, license or interest in or to the Licensed IP or [*] or any portion thereof that is inconsistent with the rights granted to Genentech herein.

(c) **[*]**.

(d) **No Encumbrances**. The Licensed IP is, and will be for the duration of the Term, free and clear of all liens, claims, security interests, licenses, covenants not to sue, or other encumbrances of any kind that would interfere, or the exercise of which would interfere, with Genentech exercising any of the licenses or other rights granted to it hereunder. As of the date of transfer to Genentech, Sangamo Controls all Know-How and materials transferred by or on behalf of Sangamo to Genentech pursuant to the Technology Transfer, free and clear of all liens, claims, security interests, licenses, covenants not to sue, or other encumbrances of any kind that would interfere, or the exercise of which would interfere, with Genentech exercising any of the licenses or other rights granted to it hereunder.

(e) **No Infringement or Misappropriation**. As of the Effective Date, Sangamo and its Affiliates have not received any written notice, and have no actual knowledge, of any claim that any Patent or Know-How owned or controlled by a Third Party has been or would be infringed or misappropriated by the Exploitation of any Licensed Payload, Licensed Capsid or Product, or by the performance [*]. To the best of Sangamo's actual knowledge as of the Effective Date (without any obligation to perform any freedom-to-operate analyses), the [*], Licensed Capsids or Products by Genentech as contemplated under this Agreement does not and will not infringe any issued Patent of any Third Party.

(f) **No Knowledge of Invalidity or Unenforceability**. Neither Sangamo nor any of its Affiliates (i) have any knowledge or information that could render invalid or unenforceable any claims that are in any Patents within the Licensed IP or (ii) has any knowledge of any inventorship disputes concerning any Patents within the Licensed IP. All filing and renewal fees payable with respect to the Patents within the Licensed IP have been timely paid.

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(g) **Inventor Assignment**. All current and former officers, employees, contractors, consultants, and agents of Sangamo of any of its Affiliates, in each case, who are inventors of, or have otherwise contributed in a material manner to the creation or development of, or will contribute to the creation or development of, any part of the Licensed Capsid, Licensed Payload, Product or any invention claimed in the Patents within the Licensed IP existing at the Effective Date, have executed and delivered to Sangamo an assignment or other agreement regarding the protection of proprietary information and the assignment of their entire rights, title, and interest in and to any such inventions to Sangamo. With respect to each of the Patents within the Licensed IP (i) all inventors of such Patents are correctly identified, (ii) such Patents have been timely and duly filed in such a manner as to perfect title and preserve priority entitlement, including by virtue of assignment documents associated with each priority filing, and (iii) no current officer, employee, contractor, consultant, or agent of Sangamo or any of its Affiliates is in violation of any term of any assignment or other agreement regarding the protection of such Patents or any other intellectual property or proprietary information of Sangamo or the applicable Affiliate.

(h) **No Governmental Authority Funding**. No portion of any Licensed IP or [*] existing as of the Effective Date was developed, and no portion of any Licensed IP or [*] not existing as of the Effective Date will be developed, in each case, using funding from any governmental authority, whether directly or indirectly.

(i) **No Prior Consent Required**. Sangamo has the lawful right to grant Genentech the rights and licenses described in this Agreement without the prior consent or approval of any Third Party (including any governmental authority or Regulatory Authority), and none of the Licensed IP existing as of the Effective Date is subject to any right of any Regulatory Authority to grant a license to or assign all or any portion of such Licensed IP to any Third Party.

(j) **Existing Third Party Agreements**. As of the Effective Date, there is no agreement with any Third Party pursuant to which Sangamo in-licensed any Patent within the Licensed IP or [*].

12.2.2 **Disclosure**.

(a) **Pre-Clinical Data**. As of the Effective Date, Sangamo has disclosed to Genentech, the results of all material pre-clinical testing of Licensed Payloads, Licensed Capsids and Products in its possession or control.

(b) **Material Information**. As of the Effective Date, Sangamo has not withheld any material information in its possession from Genentech in response to Genentech's reasonable inquiries in connection with its due diligence process relating to any Licensed Payload, Licensed Capsid or Product.

(c) **No False Statements**. Neither Sangamo nor any of its Affiliates, nor any of its or their respective officers, employees, or agents has (i) made an untrue statement of material fact or fraudulent statement to the FDA or any other Regulatory Authority with respect

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to any Licensed Payload, Licensed Capsid or Product, (ii) failed to disclose a material fact required to be disclosed to any such Regulatory Authority with respect to any Licensed Payload, Licensed Capsid or Product, or (iii) committed an act, made a statement, or failed to make a statement with respect to any Licensed Payload, Licensed Capsid or Product that could reasonably be expected to provide a basis for the FDA to invoke its policy respecting "Fraud, Untrue Statements of Material Facts, Bribery, and Illegal Gratuities", set forth in 56 Fed. Reg. 46191 (September 10, 1991) and any amendments thereto or any analogous laws or policies.

12.2.3 **Miscellaneous**.

(a) **No Claims**. [*], judicial or legal, administrative or other proceedings or governmental investigations pending or threatened in writing against Sangamo or any of its Affiliates which would be reasonably expected to adversely affect or restrict the ability of Sangamo to consummate this Agreement or the activities contemplated herein.

(b) **No Authorizations Required**. No government authorization, consent, approval, license, exemption of or filing or registration with any court or governmental department, commission, board, bureau, agency or instrumentality, domestic or foreign, under any Applicable Law currently in effect, is necessary for the consummation of the transactions contemplated by this Agreement or for the performance by it of its obligations under this Agreement (including, the grant of the rights to Genentech hereunder).

12.3 **No Other Representations, Warranties, or Covenants**. EXCEPT AS OTHERWISE EXPRESSLY PROVIDED IN THIS AGREEMENT, NEITHER PARTY MAKES ANY REPRESENTATIONS OR EXTENDS ANY WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, AND EACH PARTY HEREBY EXPRESSLY DISCLAIMS ANY AND ALL REPRESENTATIONS AND WARRANTIES NOT EXPRESSLY PROVIDED IN THIS AGREEMENT, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

ARTICLE 13 Indemnification, Limitation of Liability, Insurance

13.1 **Indemnification by Sangamo**. Subject to Section 13.3, Sangamo will indemnify, defend and hold each of Genentech, its Affiliates and their respective directors, officers, and employees, and the successors and assigns of any of the foregoing, harmless from and against any and all liabilities, damages, settlements, penalties, fines, costs or expenses (including, without limitation, reasonable attorneys' fees and other expenses of litigation) (collectively, "**Loss**" or "**Losses**") as a result of any Third Party claims, suits, actions, demands or judgments ("**Third Party Claims**") arising out of (a) breach by Sangamo of any provision under this Agreement, (b) the gross negligence or willful misconduct on the part of Sangamo or its Affiliates or their respective directors, officers, employees, and agents in connection with this Agreement, (c) the research or development of any Licensed Payload, Licensed Capsid or Product by or on behalf of Sangamo prior to the Effective Date, or (d) the Exploitation of Terminated Products by or on behalf of Sangamo, its Affiliates or sublicensees following termination of this Agreement, except, in each

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case, for those Losses for which Genentech has an obligation to indemnify Sangamo pursuant to Section 13.2, as to which Losses each Party will indemnify the other to the extent of their respective liability for the Losses.

13.2 **Indemnification by Genentech**. Subject to Section 13.3, Genentech will indemnify, defend and hold each of Sangamo, its Affiliates and their respective directors, officers, and employees, and the successors and assigns of any of the foregoing, harmless from and against any and all Losses as a result of any Third Party Claims arising out of (a) breach by Genentech of any provision under this Agreement, (b) the gross negligence or willful misconduct on the part of Genentech or its Affiliates or their respective directors, officers, employees, and agents in connection with this Agreement or (c) the Exploitation of any Licensed Capsid, Licensed Payload or Product by or on behalf of Genentech, its Affiliates or Sublicensees hereunder, except, in each case, for those Losses for which Sangamo has an obligation to indemnify Genentech pursuant to Section 13.1, as to which Losses each Party will indemnify the other to the extent of their respective liability for the Losses.

13.3 **Procedure**. If a Party intends to claim indemnification under this Agreement (the "**Indemnitee**"), it will promptly notify the other Party (the "**Indemnitor**") of such alleged Loss. The failure to deliver notice to the Indemnitor within a reasonable time after the commencement of any such action, to the extent prejudicial to its ability to defend such action, will relieve the Indemnitor of any obligation to the Indemnitee under this ARTICLE 13 with regard to such action. Only Genentech and Sangamo may claim indemnity under this Agreement (on its own behalf or on behalf of its Indemnitees), and other Indemnitees may not directly claim indemnity hereunder. The Indemnitor will have the right to control the defense thereof with counsel of its choice and reasonably acceptable to Indemnitee. Any Indemnitee will have the right to retain its own counsel at its own expense for any reason. The Indemnitee, its employees, agents and other Indemnitees, will reasonably cooperate with the Indemnitor and its legal representatives in the investigation of any Third Party Claims covered by this Agreement. The obligations of this ARTICLE 13 will not apply to amounts paid in settlement of any claim, demand, action or other proceeding if such settlement is effected without the consent of the Indemnitor, which consent will not be unreasonably withheld or delayed. The Indemnitor will not, without the written consent of the Indemnitee, effect any settlement of any Third Party Claims, unless such settlement is solely for monetary damages and includes an unconditional release of the Indemnitee from all liability on claims that are the subject matter of such proceeding.

13.4 **Insurance**. During the Term and for three (3) years thereafter, each Party will maintain commercial general liability insurance (a) combined single limit for bodily injury and property damage liability, in the minimum amount per occurrence of [*] all commencing as of the Effective Date; provided, however, Genentech has the right, in its sole discretion, to self-insure, in part or in whole, for any such coverage. The insurance policies for such coverage will be an occurrence form, but if only a claims made form is available to a Party, such Party will maintain such coverage for at least three (3) years after the later of (i) termination or expiration of this Agreement or (ii) such Party having no further obligations under this Agreement. Insurance coverage will be maintained with an insurance company or companies having an A.M. Best's

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rating (or its equivalent) of A-VII or better. On written request, Sangamo will provide to Genentech certificates of insurance evidencing the insurance coverage required under this Section 13.4. Each Party agrees to waive its right of subrogation with respect to workers' compensation claims. The limits of a Party's insurance or self-insurance coverage will not limit the Party's liability, including under the indemnification provisions of this Agreement.

13.5 **Limitation of Damages**. IN NO EVENT WILL EITHER PARTY OR ITS AFFILIATES BE LIABLE TO THE OTHER PARTY FOR SPECIAL, INDIRECT, INCIDENTAL, PUNITIVE, TREBLE OR CONSEQUENTIAL DAMAGES OR LOST PROFITS, WHETHER BASED ON CONTRACT, TORT OR ANY OTHER LEGAL THEORY, REGARDLESS OF ANY NOTICE OF SUCH DAMAGES, EXCEPT IN RESPECT OF (A) THE INDEMNIFICATION OBLIGATION OF SUCH PARTY IN RESPECT OF THIRD PARTY CLAIMS UNDER THE PROVISIONS OF THIS ARTICLE 13, (B) DAMAGES AVAILABLE FOR BREACH OF ARTICLE 10 OR ARTICLE 11, OR (C) LIABILITY IN THE CASE OF GROSS NEGLIGENCE, WILLFUL MISCONDUCT OR FRAUD BY A PARTY.

ARTICLE 14 Term, Termination

14.1 **Term**. This Agreement will commence on the Effective Date and, unless earlier terminated in accordance herewith, will continue in full force and effect, on a country-by-country and Product-by-Product basis, until the date when there is no remaining royalty payment obligation in such country with respect to such Product (such period, the "**Term**"), at which time this Agreement will expire with respect to such Product in such country.

14.2 **Termination by Either Party for Material Breach.** Either Party may terminate this Agreement in its entirety, or with respect to a particular Product or Target, by written notice to the other Party for any material breach of this Agreement by the other Party if such material breach is not cured within [*] after the breaching Party receives written notice of such material breach from the non-breaching Party (such period, the "**Cure Period**"), provided that if such material breach is not capable of being cured within the Cure Period, the Cure Period will be extended for such amount of time that the Parties may agree in writing is reasonably necessary to cure such material breach, so long as (a) the breaching Party is making diligent efforts to cure such breach, and (b) the Parties agree on an extension within such [*] period. Notwithstanding anything to the contrary herein, if the allegedly breaching Party in good faith either disputes (i) whether a breach is material or has occurred or (ii) the alleged failure to cure such material breach, and provides written notice of that dispute to the other Party within the Cure Period, then the matter will be addressed under the dispute resolution provisions in ARTICLE 15, and the Party alleging material breach may not so terminate this Agreement (in whole or in part) until it has been determined under ARTICLE 15 that the allegedly materially breaching Party is in material breach of this Agreement, and such breaching Party further fails to cure such breach within [*] after the conclusion of such dispute resolution procedure. For clarity, where an uncured material breach is related solely to a particular Product or Target, any termination

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hereunder will be limited to terminating the Agreement solely with respect to that Product or Target and not to any other Product or Target or this Agreement in its entirety.

14.3 **Termination by Either Party for Insolvency.** Either Party may terminate this Agreement effective on written notice to the other Party upon the liquidation, dissolution, winding-up, insolvency proceeding, bankruptcy, or filing of any petition therefor, appointment of a receiver, custodian, trustee, or any other similar proceeding by or of the other Party where such petition, appointment or similar proceeding is not dismissed or vacated within [*] following the filing thereof. All rights and licenses granted pursuant to this Agreement are, for purposes of Section 365(n) of Title 11 of the US Code or any foreign equivalents thereof ("**Title 11**"), licenses of rights to "intellectual property" as defined in Title 11. Each Party in its capacity as a licensor hereunder, as applicable, agrees that, unless this Agreement is terminated, in the event of the commencement of bankruptcy proceedings by or against such bankrupt Party under Title 11, (a) the other Party, in its capacity as a licensee of rights under this Agreement, will retain and may fully exercise all of such licensed rights under this Agreement and all of its rights and elections under Title 11 and (b) the other Party will be entitled to a complete duplicate of all embodiments of the licensed intellectual property (including physical embodiments and embodiments comprising data, lab notebooks, methods, or protocols, and all data within the Licensed IP), and such embodiments, if not already in possession of the other Party, will be promptly delivered to the other Party (i) upon any such commencement of a bankruptcy proceeding, unless the bankrupt Party elects to continue to perform all of its obligations under this Agreement, or (ii) if not delivered under the immediately preceding clause (i), immediately upon the rejection of this Agreement by or on behalf of the bankrupt Party.

14.4 **Elective Termination by Genentech.** Genentech will have the right to terminate this Agreement, in its entirety or on a Product-by-Product, Region-by-Region or Target-by-Target basis, in its sole discretion, at any time by providing written notice to Sangamo. Such termination will be effective [*] after Sangamo's receipt of such notice, except that with respect to any Two-Component Product (that is not a Combination Product) with which a patient has been dosed in a Phase 1 Trial prior to the date of such notice, such termination will be effective with respect to such Two-Component Product one [*] after Sangamo's receipt of such notice. For clarity, Genentech may terminate this Agreement under this Section 14.4 with respect to a particular Product in a particular Region.

14.5 **Accrued Rights and Obligations**. Expiration or termination of this Agreement for any reason will not release either Party from any liability which, as of the effective date of such expiration or termination, had already accrued to the other Party or which is attributable to a period prior to such expiration or termination, nor preclude either Party from pursuing any rights or remedies it may have hereunder or at law or in equity which accrued or are based upon any event occurring prior to the effective date of such expiration or termination.

14.6 **Effects of Termination by Sangamo for Material Breach or Insolvency or Elective Termination by Genentech**. Upon termination of this Agreement by Sangamo in its entirety or with respect to a particular Product or Target pursuant to Sections 14.2 or 14.3, as applicable, or

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Genentech's termination of this Agreement in its entirety or with respect to a particular Product, Region or Target pursuant to Section 14.4, the following provisions will apply to any Product(s), Region(s) or Target(s) affected by such termination:

14.6.1 **Termination of Licenses**. Except for the activities expressly provided in Sections 14.6.2, 14.6.3, and 14.6.6, all licenses set forth in Section 5.1 and 5.2 will terminate solely with respect to such Product(s), Region(s), or Target(s), as applicable, on the effective date of termination.

14.6.2 **Wind-Down; Continued Activities**. In the event of termination of this Agreement, notwithstanding the provision of a Continuation Election Notice, as of the date of notice of termination, Genentech will (a) have the right, at its cost and discretion, to wind-down, cancel, or complete all ongoing obligations relating to or arising from the terminated aspects of this Agreement and terminate any related agreements with Third Parties and (b) not be obligated to initiate any new activities under the terminated aspects of this Agreement. Notwithstanding anything to the contrary in this Agreement, Genentech will have the right to continue, complete, amend, or wind-down any ongoing Trials relating to any such Product(s) (including any Terminated Product(s)) for which Genentech remains the Trial sponsor or is otherwise the responsible party with respect to any Regulatory Authority, on a timeline and in a manner elected by Genentech in its reasonable direction, taking into account legal, regulatory, patient safety, and ethical considerations, and Genentech shall remain responsible for all obligations and liabilities arising out of the continuation, completion, amendment or wind-down of any such ongoing Trials.

14.6.3 **Inventory**. Except to the extent requested in an applicable Continuation Election Notice provided in accordance with Section 14.6.5, upon termination of this Agreement, Genentech, its Affiliates and Sublicensees will have the right to sell or otherwise dispose of all inventory of all Product(s) affected by such termination (including, if this Agreement is terminated solely with respect to a Region(s), in such terminated Region(s)) then in stock for [*] (or such longer period as may be agreed to by the Parties), subject to the applicable royalty payments due under Section 7.7 (as may be adjusted in accordance with Section 7.8), and Sangamo covenants not to sue Genentech, its Affiliates or Sublicensees for infringement under any of the Patents that were licensed by Sangamo to Genentech under this Agreement or that are licensed by Genentech to Sangamo under Section 14.6.6(h), solely with respect to such activities conducted by Genentech, its Affiliates, or Sublicensees pursuant to this Section 14.6.3.

14.6.4 **Continuation of Sublicenses**. In the event of termination of this Agreement by Sangamo pursuant to Sections 14.2 or 14.3, any then-existing, sublicense granted by Genentech under this Agreement will continue in full force and effect, provided that if the applicable termination was pursuant to Section 14.2, (a) the Sublicensee did not cause the uncured material breach that gave rise to such termination and (b) the Sublicensee agrees to be bound by all terms and conditions of this Agreement that are applicable to such

Sublicensee including remitting directly to Sangamo all payments and other obligations due to Sangamo related to such sublicense.

14.6.5 **Continuation Election.** Within [*] of the date of notice of termination, provided that such thirty (30) day period will be stayed pending resolution of any dispute related to whether the terminating Party has the right to terminate this Agreement, Genentech will provide Sangamo a summary report of the status of material, ongoing activities for the development, manufacture, and commercialization of any such Product(s) that are Terminated Product(s) conducted by or on behalf of Genentech, its Affiliates, and Sublicensees (collectively, the "**Continuation Election Report**"), provided that if Genentech terminates this Agreement solely with respect to a Product in a particular Region(s), the Continuation Election Report will provide a report of such activities only in the terminated Region(s). If Sangamo wishes to assume and continue any such development, manufacture, and commercialization activities, then within [*]of receipt of the Continuation Election Report, Sangamo will provide Genentech written notice of its intention, including a detailed list of the activities that Sangamo wishes to assume and continue and the documents and materials that Sangamo wishes for Genentech to transfer consistent with Section 14.6.6 (such notice, the "**Continuation Election Notice**"). Upon Genentech's timely receipt of the Continuation Election Notice, the Parties will conduct the activities described in Section 14.6.6. [*].

14.6.6 **Transfer of Terminated Product**. If Genentech timely receives the Continuation Election Notice with respect to any Terminated Product(s), then:

(a) **Regulatory Documentation**. Effective as of the effective date of termination of this Agreement or promptly thereafter, to the extent requested in the applicable Continuation Election Notice, Genentech will assign to Sangamo all Regulatory Approvals solely relating to the Terminated Product(s) (solely in the affected Region, if this Agreement is terminated solely with respect to a Region) to the extent permitted under Applicable Law. [*].

(b) **Regulatory and Clinical Documents**. On or prior to the effective date of termination of this Agreement, to the extent requested in the applicable Continuation Election Notice, Genentech will electronically transfer a copy of all final Trial reports for the Terminated Product(s) and all material correspondence with Regulatory Authorities (solely with Regulatory Authorities in the affected Region, if this Agreement is terminated solely with respect to a Region) solely relating to the Terminated Product(s) to Sangamo. For clarity, [*].

(c) **Drug Safety Databases**. Effective as of the effective date of termination of this Agreement, or if not practicable, within a reasonable period of time following the effective date of termination, to the extent requested in the applicable Continuation Election Notice, Genentech will assign and transfer to Sangamo all global drug safety databases for the Terminated Product(s), provided, however, that if this Agreement is terminated only with respect to certain Region(s), Genentech will retain the global safety database for the Terminated Product(s) and the Parties will enter into a pharmacovigilance or safety data exchange agreement

concerning the procedures and timeframes for reporting safety information related to any Product(s) affected by such termination if Genentech determines it to be appropriate. Notwithstanding the foregoing, [*].

(d) **Third Party Agreements**. Effective as of the effective date of termination of this Agreement, with respect to any Terminated Product(s) for which termination of this Agreement is not limited to particular Region(s), for any clinical or manufacturing agreement between Genentech and a Third Party that Sangamo requests to assume in the Continuation Election Notice relating to such Terminated Product, Genentech will assign to Sangamo the applicable agreement(s), to the extent Genentech is permitted to do so under such agreement(s) without additional consideration or undue burden. If Genentech is unable to assign any such agreement or if the termination of this Agreement with respect to such Terminated Product is limited to a particular Region(s), Genentech will use reasonable efforts to facilitate an introduction between Sangamo and the applicable Third Party for Sangamo to enter into its own agreement with such Third Party.

(e) **Product Trademarks**. Effective as of the effective date of termination of this Agreement, to the extent requested in the applicable Continuation Election Notice, Genentech will assign to Sangamo all of Genentech's and its Affiliates' rights, title, and interests in and to any Product Trademark(s) for the Terminated Product(s) in the terminated Region(s), provided that Genentech will in no event be obligated to assign any house marks of Genentech or its Affiliates.

(f) **Inventory**. On or promptly following the effective date of termination of this Agreement, to the extent requested in the applicable Continuation Election Notice, Genentech will transfer to Sangamo all then-existing and available inventory of the Terminated Product (except if such termination is limited to a particular Region(s), in which case Genentech will provide a reasonable portion of such inventory that is usable in such Region(s)). [*]. All inventory will be shipped from Genentech to Sangamo (or its designee) FCA (location to be provided by Sangamo) Incoterms 2020. Any and all inventory that Genentech provides to Sangamo will be provided "as is" without any representation or express or implied warranty. For clarity, nothing in this Section 14.6.6(f) will be construed as an obligation for Genentech to perform any additional activities regarding the inventory, including retesting or analyzing, prior to such transfer.

(g) **Genentech's Costs**. [*].

(h) **Reversion License**. Subject to timely provision of the Continuation Election Notice pursuant to Section 14.6.5 and this Section 14.6.6(h), effective upon the effective date of termination with respect to the applicable Terminated Product (and, for clarity, not dependent upon execution of the Transfer Agreement), Genentech hereby grants Sangamo an exclusive, worldwide (except if such termination is limited to a particular Region(s), in which case the license set forth in this Section 14.6.6(h) will be limited to such Region(s)), sublicensable right and license under all intellectual property Controlled by Genentech as of the

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effective date of termination that is (i) [*] or (ii) [*] (the "**Reversion IP**") solely to Exploit such Terminated Product (such license, the "**Reversion License**"), provided that such Reversion License will not include (x) [*], (y) [*]or (z) [*]. The Reversion License will be subject to (1) [*] and (2) [*] in each case (1) and (2), to be negotiated in good faith between the Parties as part of the Transfer Agreement.

(i) **Transfer Agreement**. For a period of [*] following Genentech's receipt of a Continuation Election Notice or such longer period as agreed to by the Parties (in either case, such period, the "**Transfer Agreement Negotiation Period**"), the Parties will negotiate and use good faith efforts to agree upon a transfer agreement whereby each Party will conduct its respective activities to facilitate the transfer of any activities and materials to the extent identified in such Continuation Election Notice and not transferred in accordance with Sections 14.6.6(a) through 14.6.6(f) (such agreement, the "**Transfer Agreement**"). The Transfer Agreement will be consistent with the following terms and conditions, as applicable to the Terminated Product(s) and terminated Region(s):

(i) **Manufacturing**. If at the time of the notice of termination, (a) Genentech is conducting a Phase 3 Trial for the Terminated Product or is marketing the Terminated Product in any country (or if such termination is limited to a particular Region(s), in any country in such Region(s)), and (b) Genentech manufactures such Terminated Product itself, then, at Sangamo's request and Sangamo's cost and expense, Genentech will manufacture and supply reasonable amounts of such Terminated Product to Sangamo to be negotiated under the Transfer Agreement, provided that (i) the duration of Genentech's obligation to supply such Terminated Product will not exceed [*] from the effective date of termination of this Agreement and (ii) the cost of such supply will not be less than Genentech's fully burdened manufacturing costs to manufacture the Terminated Product plus a mark-up of [*] as calculated according to Genentech's Accounting Standard. Notwithstanding the foregoing, Sangamo will use Commercially Reasonable Efforts to take over manufacturing of the Terminated Product as soon as possible after the effective date of termination.

(ii) **Third Party IP**. With respect to any intellectual property rights Controlled by Genentech for which the license grant in Section 14.6.6(h) would cause Genentech or its Affiliates or Sublicensees to incur a financial obligation to a Third Party, to the extent permitted under the applicable agreement with such Third Party, Genentech will either assign the agreement with such Third Party under which Genentech receives rights to such intellectual property to Sangamo or Genentech will include in the Reversion License a sublicense under such intellectual property rights, provided that Sangamo agrees to (a) comply with the terms and conditions of the applicable agreement with such Third Party, and (b) bear all payment obligations thereunder to the extent attributable to the grant of the sublicense to Sangamo or the practice of such sublicense by Sangamo, its Affiliates or its or their sublicensees.

(iii) **Genentech's Costs**. [*].

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14.6.7 **Prosecution and Maintenance**. During the Transfer Agreement Negotiation Period, the IP Committee will agree upon a fair and reasonable solution for the continued Prosecution and Maintenance of any Patents that claim the Terminated Product, including responsibility, assignments (if any), and costs in connection thereto, provided that if the applicable termination is limited to a particular Region(s), this Section 14.6.7 will apply only with respect to Patents in such Region(s). The Parties will include such solution in the Transfer Agreement.

14.6.8 **Baseball-Style Arbitration**. [*]. No other issues relating to the Transfer Agreement may be brought under ARTICLE 15.

14.7 **Effects of Termination by Genentech for Material Breach**. Upon termination of this Agreement by Genentech in its entirety or with respect to a particular Product or Target pursuant to Section 14.2, (a) all rights and licenses set forth in Section 5.1 and 5.2 will survive and become perpetual with respect to the Product(s) affected by such termination, (b) the milestone payment obligations due under Section 7.3, 7.4, and 7.6 and the royalty payment obligations under Section 7.7 (as may be adjusted in accordance with Section 7.8) will survive, provided that in addition to any other remedies Genentech may have in law or in equity, Genentech will have the right to setoff any amounts payable to Sangamo under Sections 7.3, 7.4, 7.6, or 7.7 against any amounts to which Genentech is entitled for Sangamo's breach of this Agreement or are otherwise payable by Sangamo to Genentech or any Indemnitee of Genentech pursuant to Section 13.2, and (c) Genentech will have no further diligence or other obligation under ARTICLE 4.

14.8 **Survival**. In addition to any provisions specified in this Agreement as surviving under the applicable circumstances, the following provisions will survive in the event of expiration or any termination of this Agreement: [*].

ARTICLE 15 Dispute Resolution

15.1 **Disputes**. Except as otherwise set forth in this Agreement, in the event of any dispute arising from this Agreement, such dispute will first be referred, by written notice, to the Alliance Managers for attempted resolution. If the Alliance Managers are unable to resolve the dispute within [*] following the date of receipt of such written notice, either Party may refer, by written notice (an "**Escalation Notice**"), such dispute to the respective officers of the Parties designated below or their designees, for good faith negotiations attempting to resolve the dispute within [*]. The designated officers are as follows:

For Sangamo: CEO

For Genentech: Head of Genentech Corporate Business Development

15.2 **Arbitration**.

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15.2.1 **Procedure**. Except as provided under Section 14.6.8, if the Parties are unable to resolve any dispute under Section 15.1 within the time specified therein, either Party will have the right to submit the dispute for final and exclusive resolution under the International Chamber of Commerce (ICC) Rules of Arbitration, applying the substantive law specified in Sections 15.2.3 and 16.1. The arbitration tribunal will consist of three (3) arbitrators appointed in accordance with such ICC Rules of Arbitration. Any arbitration proceeding hereunder will be conducted in San Francisco, CA and will be conducted in the English language. The arbitration tribunal may only award damages consistent with this Agreement, including Section 13.5. In the event of any conflict between the ICC Rules of Arbitration and any provision of this Agreement, this Agreement will govern.

15.2.2 **Enforcement**. Notwithstanding anything to the contrary in Section 15.2, either Party may apply to any court having competent jurisdiction to enforce the arbitration provisions of this Agreement or an arbitration award as determined pursuant to this Section 15.2. Such court will have no jurisdiction or ability to resolve disputes beyond the specific foregoing issues.

15.2.3 **Subject Matter Exclusion**. Notwithstanding anything to the contrary in Section 15.2, any dispute not resolved internally by the Parties pursuant to Section 15.1 that involves the validity or infringement of a Patent will be determined in a court of competent jurisdiction under the local patent laws of the jurisdictions having issued the Patent in question.

15.2.4 **Interim Equitable Relief**. Notwithstanding anything to the contrary in Sections 15.1 or 15.2, in the event that a Party reasonably requires relief on a more expedited basis than would be possible pursuant to the procedure set forth in this ARTICLE 15, such Party may seek a temporary injunction or other interim equitable relief in a court of competent jurisdiction pending the ability of the arbitrators to review the decision under Section 15.2. Such court will have no jurisdiction or ability to resolve disputes under this Agreement beyond the specific issue of temporary injunction or other interim equitable relief.

15.3 **Baseball-Style Arbitration**.

15.3.1 **Procedure**. If the Parties are unable to agree to the financial terms of a Reversion License, scope of a diligence obligation (if any) to be included with a Reversion License, or the Prosecution and Maintenance of Patents that claim a Terminated Product, Sangamo may provide written notice to Genentech, no later than [*]after expiration of the applicable Transfer Agreement Negotiation Period, to initiate a baseball-style arbitration proceeding pursuant to Section 15.3. Within [*] following Genentech's receipt of such notice, the Parties will use commercially reasonable efforts to mutually appoint an Expert. If the Parties cannot agree on such Expert within such time period, each Party will select one (1) Expert within such [*] period, and within [*] of their selection, the two (2) Experts so selected will appoint the Expert to conduct the arbitration in accordance with Section

15.3. Within [*] after appointment of the Expert, such Expert will set a date for the arbitration, which date will be no more than [*] after the date the arbitration is demanded above. The arbitration will be "baseball-style" arbitration; accordingly, at least [*] prior to the arbitration, each Party will provide the Expert and the other Party with a form of the definitive written agreement containing the terms of its proposal with respect to the financial terms of a Reversion License, scope of a diligence obligation (if any) to be included with a Reversion License, or the Prosecution and Maintenance of Patents that claim the Terminated Product and not any other provisions outside the scope described in Section 14.6.8. Such proposal may be no more than thirty (30) pages and must clearly provide and identify the Party's position with respect to such matter. [*] in advance of the arbitration, the Parties will submit to the Expert and exchange response briefs of no more than fifteen (15) pages. In addition, at least [*] in advance of the arbitration, each Party may submit to the Expert and the other Party a revised version of its proposal (together with a redline showing the changes from the prior draft of the proposal). Subject to the foregoing page limitations, the Parties' briefs may include or attach (a) relevant exhibits in the form of documentary evidence, (b) publicly available information, (c) demonstratives or (d) expert opinions. Neither Party may have any other communications (either written or oral) with the Expert other than for the sole purpose of engaging the Expert or as expressly permitted in this Section 15.3. The arbitration will consist of a [*] hearing of no longer than [*], such time to be split equally between the Parties, in the form of presentations by counsel or employees and officers of the Parties. No live witnesses will be permitted except expert witnesses whose opinions were provided with the respective Party's briefs.

15.3.2 **Decisions; Awards**. No later than [*] following the arbitration, the Expert will issue a written decision. The Expert will select one Party's proposal as his or her decision and will not have the authority to render any substantive decision other than to select the proposal submitted by either Genentech or Sangamo. The Expert will have no discretion or authority with respect to modifying the positions of the Parties. The Expert's decision will be final and binding on the Parties and the written agreement selected by the Expert will constitute a binding agreement between the Parties on the applicable disputed matter that may be enforced in any court of competent jurisdiction. Each Party will bear its own costs and expenses in connection with such arbitration and will share equally the Expert's fees and expenses. The violation of one of the time limits prescribed in this Section 15.3.2 by the Expert will not affect the Expert's competence to decide on the subject matter and will not affect the final and binding decision rendered by the Expert, unless otherwise agreed by the Parties.

15.4 **Continued Performance**. Provided that this Agreement has not terminated, the Parties will continue performing their respective obligations under this Agreement pending the final resolution of any dispute under this Agreement.

15.5 **Confidentiality**. The existence and status of activities conducted under this ARTICLE 15, including any arbitration proceeding or decisions hereunder will be deemed Confidential

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) the type that the Registrant treats as private or confidential.

Information of each Party, and will be subject to ARTICLE 10. Either Party may request that the arbitration tribunal issue appropriate protective orders to safeguard such Party's Confidential Information. Except as required by law, neither Party will make (or request the arbitration tribunal or Expert to make) any public announcement with respect to the proceedings or decision of the arbitration tribunal or Expert without prior written consent of the other Party. The existence of any dispute submitted to arbitration and any decision or award will be kept in confidence by each Party and the arbitration tribunal or Expert, except as required in connection with the enforcement of such award or as otherwise required by Applicable Law.

ARTICLE 16 Miscellaneous

16.1 **Choice of Law**. This Agreement (including the arbitration provisions of Sections 15.2 and 15.3) will be governed by and interpreted in accordance with the laws of the State of Delaware, without reference to the principles of conflicts of laws. The United Nations Convention on Contracts for the International Sale of Goods will not apply to the transactions contemplated by this Agreement.

16.2 **Notices**. Except as otherwise expressly provided in the Agreement, any notice required under this Agreement will be in writing and will specifically refer to this Agreement. Notices will be sent via one of the following means and will be effective (a) on the date of delivery, if delivered in person; (b) [*] after the date mailed if mailed by first class certified mail return receipt requested, postage prepaid to a destination within the same country; (c) [*] after the date mailed if mailed by registered or certified mail return receipt requested, postage prepaid to a destination outside the country of the Party sending the notice; or (d) on the date of receipt, if sent by private express courier. Notices will be sent to the other Party at the addresses set forth below. Either Party may change its address for purposes of this Section 16.2 by sending notice to the other Party in accordance with this Section 16.2. Notwithstanding the foregoing, notices required to be provided solely to a Party's Alliance Manager may be provided solely by email to such Alliance Director's email address.

If to Genentech:
Genentech, Inc.
Attn: Corporate Secretary
1 DNA Way
South San Francisco, CA 94080

with required copies (which will not constitute notice) to:

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Genentech, Inc.
Attn: Head of Global Asset & Alliance Management
1 DNA Way
South San Francisco, CA 94080
Email address: to be provided by Alliance Manager

If to Sangamo:

Sangamo Therapeutics, Inc.
Attn: Chief Executive Officer
501 Canal Blvd.
Richmond, CA 94804
[*]

with required copies (which will not constitute notice) to:

Sangamo Therapeutics, Inc.
Attn: General Counsel
501 Canal Blvd.
Richmond, CA 94804
[*]

Cooley LLP
Attn: Marya Postner, Ph.D.; Jennifer Raab
3175 Hanover Street
Palo Alto, CA 94304
[*]

16.3 **Assignment**. Neither Party may assign or otherwise transfer this Agreement, in whole or in part (including any rights or obligations hereunder), without the prior written consent of the non-assigning Party, such approval not to be unreasonably withheld or delayed. Notwithstanding the foregoing, either Party may assign this Agreement to (a) an Affiliate or (b) any purchaser of all or substantially all of the assets of such Party to which this Agreement relates, or of all of its capital stock, or to any successor corporation or entity resulting from any merger or consolidation of such Party with or into such corporation or entity, provided that in each case ((a) and (b)) the party to which this Agreement is assigned expressly agrees to assume and be bound by all obligations of the assigning Party under this Agreement. A copy of such written agreement by such assignee will be provided to the non-assigning Party within [*] of execution of such assignment. Subject to the foregoing, this Agreement will benefit and bind the Parties'

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successors and assigns. Any attempted assignment not in accordance with this Section 16.3 will be null and void.

16.4 **Independent Contractors**. The Parties are independent contractors and nothing contained in this Agreement will be deemed or construed to create a partnership, joint venture, employment, franchise, agency or fiduciary relationship between the Parties.

16.5 **Actions of Affiliates**. A Party may exercise its rights or perform its obligations under this Agreement personally or through one or more Affiliates, provided that such Party will nonetheless be primarily liable for the performance of its Affiliates and for any failure by its Affiliates to comply with the restrictions, limitations and obligations set forth in this Agreement.

16.6 **Force Majeure**. Neither Party will be deemed to have breached this Agreement for failure to perform its obligations under this Agreement (other than such Party's obligations to make any payment to the other Party under this Agreement) to the extent such failure results from causes beyond the reasonable control of the affected Party. Such causes include acts of God, earthquakes, fires, floods, embargoes, wars, acts of terrorism, insurrections, riots, civil commotions, epidemics, pandemics, omissions or delays in action by any governmental authority, acts of a government or agency thereof and judicial orders or decrees. Any deadline or time period affected by such a force majeure event or a Party's failure to perform resulting therefrom will be extended automatically by the number of days equal to the number of days that such force majeure or failure persisted. If such a force majeure event occurs, the Party unable to perform will promptly notify the other Party of the occurrence of such event, and the Parties will meet (in person, telephonically or by teleconference) promptly thereafter to discuss the circumstances relating thereto. The Party unable to perform will (a) provide reasonable status updates to the other Party from time-to-time; (b) use Commercially Reasonable Efforts to mitigate any adverse consequences arising out of its failure to perform; and (c) resume performance as promptly as possible. Further, in the event the end of any time period set forth herein falls (or any deadline herein otherwise expires) during the period beginning on December 25 of any calendar year in the Term and ending on January 1 of the following year, such time period (or deadline) will be extended by [*], unless otherwise agreed by the Parties.

16.7 **Integration**. Except to the extent expressly provided herein, this Agreement, including the Exhibits hereto, constitutes the entire agreement between the Parties relating to the subject matter of this Agreement and supersedes all previous oral and written communications between the Parties with respect to the subject matter of this Agreement, including the Non-Disclosure Agreement as set forth in Section 10.5. In the event of any conflict or inconsistency between the body of this Agreement and an Exhibit, the terms and conditions of the body of this Agreement will prevail.

16.8 **Amendment; Waiver**. Except as otherwise expressly provided herein, no alteration of or modification to this Agreement will be effective unless made in writing and executed by an authorized representative of each Party. No course of dealing or failing of either Party to strictly enforce any term, right or condition of this Agreement in any instance will be construed as a

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general waiver or relinquishment of such term, right or condition. The observance of any provision of this Agreement may be waived (either generally or any given instance and either retroactively or prospectively) only with the consent of the Party granting such waiver.

16.9 **Severability**. The Parties do not intend to violate any public policy or statutory or common law. However, if any sentence, paragraph, clause or combination or part thereof of this Agreement is in violation of any law or is found to be otherwise unenforceable, such sentence, paragraph, clause or combination or part of the same will be deleted and the remainder of this Agreement will remain binding, provided that such deletion does not alter the basic purpose and structure of this Agreement.

16.10 **No Third Party Rights**. The Parties do not intend that any term of this Agreement should be enforceable by any person who is not a Party.

16.11 **Construction**. The Parties mutually acknowledge that they and their attorneys have participated in the negotiation and preparation of this Agreement. Ambiguities, if any, in this Agreement will not be construed against any Party, irrespective of which Party may be deemed to have drafted this Agreement (or any provision herein) or authorized the ambiguous provision.

16.12 **Interpretation**. The captions and headings to this Agreement are for convenience only and are to be of no force or effect in construing or interpreting any of the provisions of this Agreement. Unless context otherwise clearly requires, whenever used in this Agreement: (a) the words "include" or "including" will be construed as incorporating "but not limited to" or "without limitation"; (b) the words "hereof," "herein," "hereby", "hereunder" and derivative or similar words refer to this Agreement, including the Exhibits; (c) all references herein to Articles, Sections or Exhibits will be construed to refer to Articles, Sections or Exhibits of this Agreement; (d) any definition of or reference to any agreement, instrument or other document herein will be construed as referring to such agreement, instrument or other document as from time to time amended, supplemented or otherwise modified (subject to any restrictions on such amendments, supplements or modifications set forth herein); (e) the word "notice" means notice in writing (whether or not specifically stated) and will include notices, consents, approvals and other written communications contemplated under this Agreement; (f) provisions that require that a Party, the Parties or any committee hereunder "agree", "consent" or "approve" or the like will require that such agreement, consent or approval be specific and in writing, whether by written agreement, letter, approved minutes or otherwise (but excluding instant messaging); (g) references to any specific law, rule or regulation, section or other division thereof, will be deemed to include the then-current amendments thereto or any replacement or successor law, rule or regulation thereof; (h) all references to the word "shall" are interchangeable with the word "will" and will be understood to be imperative or mandatory in nature; (i) the singular will include the plural and vice versa; (j) the word "or" has the inclusive meaning represented by the phrase "and/or"; (k) all references to days, months, quarters or years are references to calendar days, calendar months, calendar quarters, or calendar years, unless otherwise explicitly stated and (l) all references to "intellectual property rights" herein mean Patents, proprietary rights in Know-How, trade secrets, proprietary rights associated with works of authorship, including

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copyrights, moral rights, and all applications, registrations and renewals relating thereto, and other forms of proprietary and intellectual property rights, however denominated throughout the world, other than Trademarks.

16.13 **Counterparts; Electronic Signatures**. This Agreement may be executed in one or more counterparts, each of which will be deemed an original, but all of which together will constitute one and the same instrument. For purposes hereof, a facsimile copy, or email with attached .pdf copy, of this Agreement, including the signature pages hereto, will be deemed to be an original. Execution of this Agreement by e-Signatures or by exchanging executed signature pages in .pdf format will have the same legal force and effect as the exchange of original signatures. As used in this Section 16.13, "e-Signature" will mean a signature that consists of one or more letters, characters, numbers or other symbols in digital form incorporated in, attached to or associated with the electronic document, that (a) is unique to the person executing the signature; (b) the technology or process used to make the signature is under the sole control of the person making the signature; (c) the technology or process can be used to identify the person using the technology or process; and (d) the electronic signature can be linked with an electronic document in such a way that it can be used to determine whether the electronic document has been changed since the electronic signature was incorporated in, attached to or associated with the electronic document.

[Signature page follows – the rest of this page intentionally left blank.]

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IN WITNESS WHEREOF, Sangamo and Genentech have executed this Agreement by their respective officers hereunto duly authorized, effective as of the Effective Date.

SANGAMO THERAPEUTICS, INC.

By: /s/ Sandy Macrae

Name: Dr. Sandy Macrae

Title: CEO

GENENTECH, INC.

By: /s/ Jeff Hutchings

Name:

Title: VP, Controller

Exhibit 1.13

(one page omitted)

Exhibit 1.64

(4 pages omitted)

Exhibit 1.71

(one page omitted)

Exhibit 1.105

(1 page omitted)

Exhibit 1.109

(2 pages omitted)

Exhibit 2.1

(18 pages omitted)

Exhibit 3.1.1

(7 pages omitted)

Exhibit 3.2

(2 pages omitted)

Exhibit 11.1

(3 pages omitted)

THIRD AMENDMENT TO LEASE AGREEMENT

THIS THIRD AMENDMENT TO LEASE AGREEMENT (this **"Third Amendment")** is entered into as of July 3, 2024, (the **"Third Amendment Effective Date"),** by and between **PPF OFF 7000 MARINA BOULEVARD LP,** a Delaware limited partnership **("Landlord"),** and **SANGAMO THERAPEUTICS, INC.,** a Delaware corporation **("Tenant"),** with reference to the following facts:

A. Landlord (as successor to Marina Boulevard Property, LLC) and Tenant are parties to that certain Lease Agreement dated November 3, 2017 (the **"Original Lease"),** as amended by that certain First Amendment to Lease Agreement dated as of January 1, 2019 (the **"First Amendment")** and that certain Second Amendment to Lease Agreement dated as of February 5, 2024 (the **"Second Amendment")** (the Original Lease, as so amended, being referred to herein as the **"Lease"),** pursuant to which Landlord leases to Tenant the entire rentable square feet of the building located at 7000 Marina Boulevard, Brisbane, California (the **"Building"),** which contains approximately 87,695 rentable square feet in the aggregate (the **"Premises").** The Building is part of a multi-building complex known as Marina Landing.

B. Landlord and Tenant desire to modify the timing for Tenant's replacement of the letter of credit or delivery of the cash security deposit as originally contemplated in Section 1(b) of the Second Amendment.

NOW, THEREFORE, in consideration of the above recitals which by this reference are incorporated herein, the mutual covenants and conditions contained herein and other valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Landlord and Tenant agree as follows:

1. **Time for delivery of Cash Security Deposit or Letter of Credit.** The reference to "June 1, 2024" set forth in Section 1 (b) of the Second Amendment is hereby deleted and replaced with "September 30, 2024."

2. **Miscellaneous.**

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

(b) In the case of any inconsistency between the provisions of the Lease and this Third Amendment, the provisions of this Third Amendment shall govern and control.

(c) Submission of this Third Amendment by Landlord is not an offer to enter into this Third Amendment. Landlord and Tenant shall not be bound by this Third Amendment until Landlord and Tenant have mutually executed and delivered the same to Tenant.

(d) Capitalized terms used in this Third Amendment shall have the same definitions as set forth in the Lease to the extent that such capitalized terms are defined therein and not redefined in this Third Amendment.

(e) Tenant hereby represents to Landlord that Tenant has dealt with no broker in connection with this Third Amendment. Tenant agrees to defend, indemnify and hold Landlord harmless from all claims of any brokers claiming to have represented Tenant in connection with this Third Amendment. Landlord hereby represents to Tenant that Landlord has dealt with no broker in connection with this Third Amendment. Landlord agrees to indemnify and hold Tenant harmless from all claims of any brokers claiming to have represented Landlord in connection with this Third Amendment.

(f) Each signatory of this Third Amendment represents hereby that such signatory has the authority to execute and deliver the same on behalf of the party hereto for which such signatory is acting.

(g) Tenant represents and warrants to Landlord that Tenant is currently in compliance with and shall at all times (including any extension thereof) 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.

(h) This Third Amendment may be executed in multiple counterparts each of which is deemed an original but together constitute one and the same instrument. This Third Amendment may be executed in so-called "pdf' format and each party has the right to rely upon a pdf counterpart of this Third Amendment signed by the other party to the same extent as if such party had received an original counterpart. Electronic signatures on this Third Amendment shall be valid and effective to bind the party so signing electronically.

[SIGNATURES ARE ON FOLLOWING PAGE]

IN WITNESS WHEREOF, Landlord and Tenant have duly executed this Third Amendment to Lease Agreement as of the Third Amendment Effective Date.

LANDLORD:

PPF PFF 7000 MARINA BOULEVARD LP,
a Delaware limited liability company

By: /s/ Todd O'Sanders
Name: Todd O'Sanders
Title: Executive Director

TENANT:

SANGAMO THERAPEUTICS, INC.,
a Delaware corporation

By: /s/ Prathyusha Duraibabu
Print Name: Prathyusha Duraibabu
Its: CFO

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: November 12, 2024

/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: November 12, 2024

/s/ PRATHYUSHA DURAIBABU

Prathyusha Duraibabu
Senior Vice President and Chief Financial Officer
(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 September 30, 2024, 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: November 12, 2024

/s/ PRATHYUSHA DURAIBABU
Prathyusha Duraibabu
Senior Vice President and Chief Financial Officer
(Principal Financial and Accounting Officer)

Date: November 12, 2024

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.