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

FORM 10-Q

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

For the quarterly period ended September 30, 2020

OR

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

Commission file number 001-38129

Mersana Therapeutics, Inc.
(Exact name of registrant as specified in its charter)

Delaware	**04-3562403**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

840 Memorial Drive Cambridge, MA 02139
(Address of principal executive offices)
(Zip Code)

(617) 498-0020
(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, $0.0001 par value	MRSN	The Nasdaq Global Select Market

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T 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, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

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

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

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

There were 68,497,425 shares of Common Stock ($0.0001 par value per share) outstanding as of November 4, 2020.

Unless otherwise stated or the context requires otherwise, all references to "us," "our," "we," the "Company" and similar designations in this Quarterly Report on Form 10-Q refer to Mersana Therapeutics, Inc. and its consolidated subsidiary, Mersana Securities Corp.

FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q contains forward-looking statements. Forward-looking statements are neither historical facts nor assurances of future performance. Instead, they are based on our current beliefs, expectations and assumptions regarding the future of our business, future plans and strategies, our clinical results and other future conditions. The words "aim," "anticipate," "believe," "contemplate," "continue," "could," "estimate," "expect," "goal," "intend," "may," "on track," "plan," "possible," "potential," "predict," "project," "seek," "should," "target," "will," "would" or the negative of these terms or other similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words.

These forward-looking statements include, among other things, statements about:

- the initiation, cost, timing, progress and results of our current and future research and development activities and preclinical and clinical studies;
- the adequacy of our inventory of XMT-1536 and XMT-1592 to support our ongoing clinical studies, as well as the outcome of planned manufacturing runs;
- the timing of, and our ability to obtain and maintain, regulatory approvals for our product candidates;
- unmet need of ovarian cancer and non-small cell lung cancer;
- our ability to quickly and efficiently identify and develop additional product candidates;
- our ability to advance any product candidate into, and successfully complete, clinical studies;
- our intellectual property position, including with respect to our trade secrets;
- the potential benefits of strategic partnership agreements and our ability to enter into selective strategic partnerships;
- our estimates regarding expenses, future revenues, capital requirements, the sufficiency of our current and expected cash resources and our need for additional financing; and
- the potential impact of the ongoing COVID-19 pandemic.

We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements we make. We have included important factors in the cautionary statements included in our Annual Report on Form 10-K for the year ended December 31, 2019 and our Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2020, particularly in the "Risk Factors" sections, that we believe could cause actual results or events to differ materially from the forward-looking statements that we make. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures or investments we may make.

In addition, while we expect that the COVID-19 pandemic might adversely affect our preclinical and clinical development efforts, business operations and financial results, the extent of the impact and the value of and market for our common stock will depend on future developments that are highly uncertain and cannot be predicted with confidence at this time, such as the ultimate duration of the pandemic, travel restrictions, quarantines, physical distancing and business closure requirements in the U.S. and in other countries, and the effectiveness of actions taken globally to contain and treat the disease.

The forward-looking statements contained herein represent our views as of the date of this Quarterly Report on Form 10-Q. We anticipate that subsequent events and developments will cause our views to change. You should, therefore, not rely on these forward-looking statements as representing our views as of any date subsequent to the date of this Quarterly Report on Form 10-Q.

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PART I – FINANCIAL INFORMATION

Item 1. Financial Statements

Mersana Therapeutics, Inc.
Condensed Consolidated Balance Sheets
(in thousands, except share and per share data)
(unaudited)

	September 30, 2020	December 31, 2019
Assets		
Current assets:		
Cash and cash equivalents	$ 270,936	$ 62,351
Short-term marketable securities	—	37,439
Prepaid expenses and other current assets	3,998	1,536
Total current assets	274,934	101,326
Property and equipment, net	1,698	2,164
Operating lease right-of-use assets	11,343	2,598
Other assets	2,153	1,453
Total assets	$ 290,128	$ 107,541
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	$ 4,528	$ 7,296
Accrued expenses	11,173	8,986
Deferred revenue	3,998	4,815
Operating lease liabilities	1,280	2,219
Short-term debt	—	667
Other liabilities	91	87
Total current liabilities	21,070	24,070
Operating lease liabilities	10,606	677
Long-term debt, net	4,944	4,201
Other liabilities	200	275
Total liabilities	36,820	29,223
Commitments (Note 11)		
Stockholders' equity:		
Preferred stock, $0.0001 par value; 25,000,000 shares authorized; 0 shares issued and outstanding at September 30, 2020 and December 31, 2019, respectively	—	—
Common stock,$0.0001 par value; 175,000,000 shares authorized; 68,470,081 and 45,388,023 shares issued and outstanding at September 30, 2020 and December 31, 2019, respectively	7	5
Additional paid-in capital	504,876	270,662
Accumulated other comprehensive income (loss)	—	25
Accumulated deficit	(251,575)	(192,374)
Total stockholders' equity	253,308	78,318
Total liabilities and stockholders' equity	$ 290,128	$ 107,541

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

Mersana Therapeutics, Inc.
Condensed Consolidated Statements of Operations and Comprehensive Loss
(in thousands, except share and per share data)
(unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Collaboration revenue	$ 11	$ 844	$ 817	$ 42,081
Operating expenses:				
Research and development	16,546	13,701	44,179	42,610
General and administrative	5,881	4,436	15,988	13,072
Total operating expenses	22,427	18,137	60,167	55,682
Other income (expense):				
Interest income	19	608	414	1,785
Interest expense	(92)	(107)	(267)	(146)
Total other income (expense), net	(73)	501	147	1,639
Net loss	(22,489)	(16,792)	(59,203)	(11,962)
Other comprehensive loss				
Unrealized gain (loss) on marketable securities	(2)	17	(25)	36
Comprehensive loss	$ (22,491)	$ (16,775)	$ (59,228)	$ (11,926)
Net loss attributable to common stockholders — basic and diluted	$ (22,489)	$ (16,792)	$ (59,203)	$ (11,962)
Net loss per share attributable to common stockholders — basic and diluted	$ (0.33)	$ (0.35)	$ (1.00)	$ (0.28)
Weighted-average number of shares of common stock used in net loss per share attributable to common stockholders — basic and diluted	68,419,192	47,833,607	59,086,202	42,011,340

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

Mersana Therapeutics, Inc.
Condensed Consolidated Statements of Stockholders' Equity
(in thousands, except share data)
(unaudited)

	Common Stock		Additional Paid-in Capital	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Stockholders' Equity
	Shares	Amount				
Balance at December 31, 2018	23,234,472	$ 3	$ 172,966	$ (8)	$ (164,166)	$ 8,795
Exercise of stock options	12,192	—	42	—	—	42
Issuance of common stock under public offering, net of issuance costs of $5,587	24,437,500	2	92,160	—	—	92,162
Stock-based compensation expense	—	—	1,164	—	—	1,164
Other comprehensive income	—	—	—	8	—	8
Net income	—	—	—	—	21,901	21,901
Balance at March 31, 2019	47,684,164	$ 5	$ 266,332	$ —	$ (142,265)	$ 124,072
Exercise of stock options	32,693	—	58	—	—	58
Purchase of common stock under ESPP	82,281	—	283	—	—	283
Stock-based compensation expense	—	—	1,161	—	—	1,161
Other comprehensive income	—	—	—	11	—	11
Net loss	—	—	—	—	(17,071)	(17,071)
Balance at June 30, 2019	47,799,138	$ 5	$ 267,834	$ 11	$ (159,336)	$ 108,514
Exercise of stock options and warrants	83,759	—	21	—	—	21
Stock-based compensation expense	—	—	1,285	—	—	1,285
Other comprehensive income	—	—	—	17	—	17
Net loss	—	—	—	—	(16,792)	(16,792)
Balance at September 30, 2019	47,882,897	$ 5	$ 269,140	$ 28	$ (176,128)	$ 93,045
Retirement of common stock in exchange for common stock warrant	(2,575,000)	—	(8,986)	—	—	(8,986)
Issuance of common stock warrant in exchange for retirement of common stock	—	—	8,986	—	—	8,986
Purchase of common stock under ESPP	57,792	—	206	—	—	206
Exercise of stock options and warrants	22,334	—	54	—	—	54
Stock-based compensation expense	—	—	1,262	—	—	1,262
Other comprehensive loss	—	—	—	(3)	—	(3)
Net loss	—	—	—	—	(16,246)	(16,246)
Balance at December 31, 2019	45,388,023	$ 5	$ 270,662	$ 25	$ (192,374)	$ 78,318
Exercise of common stock warrant in exchange for common stock	2,574,971	—	—	—	—	—
Exercise of stock options	43,055	—	119	—	—	119
Stock-based compensation expense	—	—	1,609	—	—	1,609
Other comprehensive loss	—	—	—	(29)	—	(29)
Net loss	—	—	—	—	(16,926)	(16,926)
Balance at March 31, 2020	48,006,049	$ 5	$ 272,390	$ (4)	$ (209,300)	$ 63,091
Issuance of common stock from at-the-market transactions, net of issuance costs of $2,176	10,900,599	1	62,976	—	—	62,977
Issuance of common stock under public offering, net of issuance costs of $10,809	9,200,000	1	163,990	—	—	163,991
Purchase of common stock under ESPP	68,419	—	333	—	—	333
Exercise of stock options	206,143	—	1,296	—	—	1,296
Stock-based compensation expense	—	—	1,656	—	—	1,656
Other comprehensive income	—	—	—	6	—	6
Net loss	—	—	—	—	(19,786)	(19,786)
Balance at June 30, 2020	68,381,210	$ 7	$ 502,641	$ 2	$ (229,086)	$ 273,564
Exercise of stock options	88,871	—	317	—	—	317
Stock-based compensation expense	—	—	1,918	—	—	1,918
Other comprehensive loss	—	—	—	(2)	—	(2)
Net loss	—	—	—	—	(22,489)	(22,489)
Balance at September 30, 2020	68,470,081	$ 7	$ 504,876	$ —	$ (251,575)	$ 253,308

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

Mersana Therapeutics, Inc.
Condensed Consolidated Statements of Cash Flows
(in thousands)
(unaudited)

	Nine Months Ended September 30,	
	2020	2019
Cash flows from operating activities		
Net loss	$ (59,203)	$ (11,962)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation	750	963
Net amortization of premiums and discounts on investments	(86)	(87)
Stock-based compensation	5,183	3,610
Other non-cash items	110	65
Changes in operating assets and liabilities:		
Accounts receivable	—	161
Prepaid expenses and other current assets	(2,460)	1,318
Other assets	(700)	—
Accounts payable	(2,766)	(3,102)
Accrued expenses	2,367	(4,518)
Operating lease assets	1,235	1,290
Operating lease liabilities	(990)	(1,356)
Deferred revenue	(817)	(41,550)
Net cash used in operating activities	(57,377)	(55,168)
Cash flows from investing activities		
Maturities of marketable securities	37,500	10,500
Purchase of marketable securities	—	(53,688)
Purchase of property and equipment	(285)	(605)
Net cash provided by (used in) investing activities	37,215	(43,793)
Cash flows from financing activities		
Net proceeds from public offering of common stock	163,990	92,162
Net proceeds from the at-the-market (ATM) facility	62,976	—
Proceeds from exercise of stock options	1,732	121
Proceeds from purchases of common stock under ESPP	333	283
Proceeds from issuance of debt, net of issuance costs	(197)	4,965
Payments under capital lease obligations	(87)	(58)
Net cash provided by financing activities	228,747	97,473
Increase (decrease) in cash, cash equivalents and restricted cash	208,585	(1,488)
Cash, cash equivalents and restricted cash, beginning of period	62,672	60,005
Cash, cash equivalents and restricted cash, end of period	$ 271,257	$ 58,517
Supplemental disclosures of non-cash activities:		
Debt financing costs in accrued expenses	$ —	$ 180
Cash paid for interest	$ 173	$ 64
Right-of-use assets obtained in exchange for operating lease liabilities	$ 9,980	$ 4,778
Right-of-use assets obtained in exchange for financing lease liabilities	$ —	$ 429

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

Mersana Therapeutics, Inc.
Notes to condensed consolidated financial statements
(in thousands, except share and per share data)
(unaudited)

1. Nature of business and basis of presentation

Mersana Therapeutics, Inc. is a clinical stage biopharmaceutical company focused on developing antibody drug conjugates (ADCs) that offer a clinically meaningful benefit for cancer patients with significant unmet need. The Company has leveraged 20 years of industry learning in the ADC field to develop proprietary and differentiated technology platforms that enable it to design ADCs to have improved efficacy, safety and tolerability relative to existing ADC therapies. The Company's innovative platforms, which include Dolaflexin and Dolasynthen, each delivering its DolaLock payload, as well as Immunosynthen, delivering a novel stimulator of interferon genes (STING) agonist, provide an efficient product engine that has enabled a robust discovery pipeline for the Company and its partners. The Company's product candidates include XMT-1536 and XMT-1592. The Company's early stage programs include a potentially first-in-class B7-H4-targeted DolaLock ADC as well as candidates leveraging the Immunosynthen platform.

XMT-1536, an ADC utilizing the Company's Dolaflexin platform and targeting NaPi2b, an antigen broadly expressed in ovarian cancer and non-small cell lung cancer (NSCLC) adenocarcinoma, is currently in the expansion portion of a Phase 1 study in patients with ovarian cancer and NSCLC adenocarcinoma. XMT-1592 uses one of the Company's new platforms, Dolasynthen, and also targets NaPi2b. The Company filed an Investigational New Drug (IND) application in the first quarter of 2020 and initiated the Phase 1 dose escalation study of XMT-1592 in the second quarter of 2020.

The Company has incurred cumulative net losses since inception. For the nine months ended September 30, 2020, the net loss was $59,203, compared to net loss of $11,962 in the nine months ended September 30, 2019. The difference year over year is primarily attributable to $39,965 in deferred revenue that was recognized in the first quarter of 2019 as a result of the discontinuation of the partnership with Takeda in that quarter. The Company expects to continue to incur operating losses for at least the next several years. As of September 30, 2020, the Company had an accumulated deficit of $251,575. The future success of the Company is dependent on, among other factors, its ability to identify and develop its product candidates and ultimately upon its ability to attain profitable operations. The Company has devoted substantially all of its financial resources and efforts to research and development and general and administrative expense to support such research and development. Net losses and negative operating cash flows have had, and will continue to have, an adverse effect on the Company's stockholders' equity and working capital.

In April 2020, the Company sold 10,900,599 shares of common stock and received net proceeds of $62,976. In addition, in June 2020, the Company sold 9,200,000 shares of common stock and received net proceeds of $163,991. The Company believes that its currently available funds will be sufficient to fund the Company's operations through at least the next twelve months from the issuance of this Quarterly Report on Form 10-Q. Management's belief with respect to its ability to fund operations is based on estimates that are subject to risks and uncertainties. If actual results are different from management's estimates, the Company may need to seek additional funding.

The Company is subject to risks common to companies in the biotechnology industry, including but not limited to, the need for additional capital, risks of failure of preclinical and clinical studies, the need to obtain marketing approval and reimbursement for any drug product candidate that it may identify and develop, the need to successfully commercialize and gain market acceptance of its product candidates, dependence on key personnel, protection of proprietary technology, compliance with government regulations, development of technological innovations by competitors, reliance on third party manufacturers and the ability to transition from pilot-scale production to large-scale manufacturing of products.

The Company's unaudited condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States (U.S. GAAP) and the rules and regulations of the Securities and Exchange Commission (SEC). Any reference in these notes to applicable guidance is meant to refer to the authoritative U.S. GAAP as found in the Accounting Standards Codification (ASC) and Accounting Standards

Updates (ASU) of the Financial Accounting Standards Board (FASB). All dollar amounts, except per share data in the text and tables herein, are stated in thousands unless otherwise indicated. Certain information and footnote disclosures normally included in annual financial statements prepared in accordance with U.S. GAAP have been condensed or omitted from this report, as is permitted by such rules and regulations. Accordingly, these financial statements should be read in conjunction with the audited financial statements as of and for the year ended December 31, 2019 and the notes thereto, included in the Company's Annual Report on Form 10-K for the year ended December 31, 2019 filed with the SEC on February 28, 2020.

The unaudited condensed consolidated financial statements have been prepared on the same basis as the audited financial statements. In the opinion of the Company's management, the accompanying unaudited condensed consolidated financial statements contain all adjustments that are necessary to present fairly the Company's financial position as of September 30, 2020, the results of its operations for the three and nine months ended September 30, 2020 and 2019, a statement of stockholders' equity for the three and nine months ended September 30, 2020 and 2019 and cash flows for the nine months ended September 30, 2020 and 2019. Such adjustments are of a normal and recurring nature. The results for the three and nine months ended September 30, 2020 are not necessarily indicative of the results for the year ending December 31, 2020, or for any future period.

2. Summary of Significant Accounting Policies

Principles of Consolidation

The accompanying unaudited condensed consolidated financial statements include those of the Company and its wholly owned subsidiary, Mersana Securities Corp. All intercompany balances and transactions have been eliminated.

Use of Estimates

The preparation of the Company's unaudited condensed consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, equity, revenue, expenses and related disclosure of contingent assets and liabilities at the date of the financial statements and reported amounts of revenue and expenses during the reporting period. On an ongoing basis, the Company's management evaluates its estimates which include, but are not limited to, management's judgments with respect to the identification of performance obligations and standalone selling prices of those performance obligations within its revenue arrangements, accrued expenses, valuation of stock-based awards and income taxes. Actual results could differ from those estimates.

Segment Information

Operating segments are defined as components of an enterprise about which separate discrete information is available for evaluation by the chief operating decision-maker, or decision making group, in deciding how to allocate resources and assess performance. The Company views its operations and manages its business as a single operating segment, which is the business of discovering and developing ADCs.

Summary of Accounting Policies

The significant accounting policies used in preparation of these condensed consolidated financial statements for the three and nine months ended September 30, 2020 are consistent with those discussed in Note 2 to the consolidated financial statements in the Company's 2019 Annual Report on Form 10-K, except as otherwise noted below in "Recently Issued Accounting Pronouncements."

Mersana Therapeutics, Inc.
Notes to condensed consolidated financial statements (continued)
(in thousands, except share and per share data)
(unaudited)

Fair Value Measurements

Fair value is defined as the price that would be received upon sale of an asset or paid to transfer a liability between market participants at measurement dates. ASC Topic 820 *Fair Value Measurement* (ASC 820) establishes a three-level valuation hierarchy for instruments measured at fair value. The hierarchy is based on the transparency of inputs to the valuation of an asset or liability as of the measurement date. The three levels are defined as follows:

Level 1—Inputs to the valuation methodology are quoted prices (unadjusted) for identical assets or liabilities in active markets.

Level 2—Inputs to the valuation methodology include quoted prices for similar assets and liabilities in active markets, and inputs that are observable for the asset or liability, either directly or indirectly, for substantially the full term of the financial instrument.

Level 3—Inputs to the valuation methodology are unobservable and significant to the fair value measurement.

Cash and Cash Equivalents

The Company considers all highly liquid investments with an original maturity, or a remaining maturity at the time of purchase, of three months or less to be cash equivalents. The Company invests excess cash primarily in money market funds, commercial paper and government agency securities, which are highly liquid and have strong credit ratings. These investments are subject to minimal credit and market risks. Cash and cash equivalents are stated at cost, which approximates market value.

	Nine Months Ended September 30, 2020		Nine Months Ended September 30, 2019	
	Beginning of period	End of period	Beginning of period	End of period
Cash and cash equivalents	$ 62,351	$ 270,936	$ 59,634	$ 58,196
Restricted cash included in other assets, noncurrent	321	321	371	321
Total cash, cash equivalents and restricted cash per statement of cash flows	$ 62,672	$ 271,257	$ 60,005	$ 58,517

Marketable Securities

Short-term marketable securities consist of investments in debt securities with maturities greater than three months and less than one year from the balance sheet date. The Company classifies all of its marketable securities as available-for-sale. Accordingly, these investments are recorded at fair value. Amortization and accretion of discounts and premiums are recorded as interest income within other income. Prior to the adoption of ASU 2016-13, *Financial Instruments - Credit Losses*, unrealized gains and losses on available-for-sale securities are included in other accumulated comprehensive income (loss) as a component of stockholders' equity until realized. Realized gains and losses and declines in value judged to be other than temporary are included as a component of other income (expense), net, based on the specific identification method. When determining whether a decline in value is other than temporary, the Company considers various factors, including whether the Company has the intent to sell the security, and whether it is more likely than not that the Company will be required to sell the security prior to recovery of its amortized cost basis. Fair value is determined based on quoted market prices.

Other Assets

The Company recorded other assets of $2,153 and $1,453 as of September 30, 2020 and December 31, 2019, respectively, comprised of $1,832 and $1,132, respectively, held by a service provider, and restricted cash of $321 at the end of each period held as security deposits for a standby letter of credit related to a facility lease.

Mersana Therapeutics, Inc.
Notes to condensed consolidated financial statements (continued)
(in thousands, except share and per share data)
(unaudited)

Net Loss per Share

Basic net loss per common share is calculated by dividing the net loss attributable to common stockholders by the weighted-average number of shares of common stock outstanding during the period, without further consideration for potentially dilutive securities. Diluted net loss per share is computed by dividing the net loss attributable to common stockholders by the weighted-average number of shares of common stock and potentially dilutive securities outstanding for the period determined using the treasury stock and if-converted methods.

For purposes of the diluted net loss per share calculation, stock options, unvested restricted stock units (RSUs), warrants to purchase common stock and options to purchase common stock are considered to be potentially dilutive securities, but are excluded from the calculation of diluted net loss per share because their effect would be anti-dilutive and therefore, basic and diluted net loss per share were the same for all periods presented.

The following table sets forth the outstanding potentially dilutive securities that have been excluded from the calculation of diluted net loss per share for the three and nine months ended September 30, 2020 and 2019, because to include them would be anti-dilutive (in common stock equivalent shares):

	Three and Nine Months Ended September 30, 2020	Three and Nine Months Ended September 30, 2019
Stock options	6,215,368	4,718,597
Unvested restricted stock units	740,862	447,336
Warrants	39,474	39,474
	6,995,704	5,205,407

Recently Issued Accounting Pronouncements

In November 2018, the FASB issued ASU No. 2018-18, *Collaborative Arrangements (Topic 808): Clarifying the Interaction between Topic 808 and Topic 606*. The main provisions of ASU 2018-18 include: (i) clarifying that certain transactions between collaborative arrangement participants should be accounted for as revenue when the collaborative arrangement participant is a customer in the context of a unit of account and (ii) precluding the presentation of transactions with collaborative arrangement participants that are not directly related to sales to third parties together with revenue. This guidance is effective for annual reporting periods beginning after December 15, 2019, including interim periods within those annual reporting periods, and early adoption is permitted. The guidance per ASU 2018-18 is to be adopted retrospectively to the date of initial application of Topic 606. The Company adopted the new standard effective January 1, 2020. The adoption of this standard did not have a material impact on the Company's consolidated financial statements and related disclosures.

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments-Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*, which requires that financial assets measured at amortized cost be presented at the net amount expected to be collected. Historically, U.S. GAAP delayed recognition of the full amount of credit losses until the loss was probable of occurring. Under this ASU, the income statement will reflect an entity's current estimate of all expected credit losses. The measurement of expected credit losses will be based upon historical experience, current conditions, and reasonable and supportable forecasts that affect the collectability of the reported amount. Credit losses relating to available-for-sale debt securities will be recorded through an allowance for credit losses rather than as a direct write-down of the security. This ASU is effective for annual periods beginning after December 15, 2019, including interim periods within those annual reporting periods, and early adoption is permitted. The Company adopted the new standard effective January 1, 2020 using the modified retrospective method. The adoption of this standard did not have a material impact on the Company's consolidated financial statements and related disclosures.

Mersana Therapeutics, Inc.
Notes to condensed consolidated financial statements (continued)
(in thousands, except share and per share data)
(unaudited)

3. Collaboration agreements

Merck KGaA

In June 2014, the Company entered into a Collaboration and Commercial License Agreement with Merck KGaA (the Merck KGaA Agreement). Upon the execution of the agreement, Merck KGaA paid the Company a nonrefundable technology access fee of $12,000 for the right to develop ADCs directed to six exclusive targets over a specified period of time. No additional fees are due when a target is designated and the commercial license to the target is granted. Merck KGaA will be responsible for the product development and marketing of any products resulting from this collaboration. All six targets were designated prior to 2018. The Company is eligible to receive milestones under the Merck KGaA Agreement. The next potential milestone payment is a development milestone of $500 on Merck KGaA's designation of a preclinical development candidate for a target. Revenue for the milestone is fully constrained until it is certain the milestone would be achieved.

Under the terms of the Merck KGaA Agreement, the Company and Merck KGaA develop research plans to evaluate Merck KGaA's antibodies as ADCs incorporating the Company's technology. The Company receives reimbursement for its efforts under the research plans. The goal of the research plans is to provide Merck KGaA with sufficient information to formally nominate a development candidate and begin IND-enabling studies or cease development on the designated target.

In May 2018, the Company entered into a Supply Agreement with Merck KGaA (the Merck KGaA Supply Agreement). Under the terms of the Merck KGaA Supply Agreement, the Company will provide Merck KGaA preclinical non-GMP ADC Drug Substance and clinical GMP Drug Substance for use in clinical trials associated with one of the antibodies designated under the Merck KGaA Agreement. The Company receives fees for its efforts under the Merck KGaA Supply Agreement and reimbursement equal to the supply cost. The Company may also enter into future supply agreements to provide clinical supply material should Merck KGaA pursue clinical development of any other candidates nominated under the Merck KGaA Agreement.

Accounting Analysis

The Company identified the following performance obligations under the Merck KGaA agreement: (i) exclusive license and research services for six designated targets, (ii) rights to future technological improvements and (iii) participation of project team leaders and providing joint research committee services.

The Company is recognizing revenue related to the exclusive license and research and development services over the estimated period of the research and development services using a proportional performance model. The Company measures proportional performance based on the costs incurred relative to the total costs expected to be incurred. To the extent that the Company receives fees for the research services as they are performed, these amounts are recorded as deferred revenue. Revenue related to future technological improvements and joint research committee services will be recognized ratably over the respective performance period (which in the case of the joint research committee services approximates the time and cost incurred each period), which are 10 and five years, respectively. The Company is continuing to reassess the estimated remaining term at each subsequent reporting period. As of December 31, 2019, the total transaction price for the Merck KGaA Agreement was $21,500, which represented the amount of consideration the Company was expected to receive for the transfer of goods and services to Merck KGaA. During the nine months ended September 30, 2020, the Company decreased the fees expected to be received for research and development activities by $175 to $6,325, resulting in a revised total transaction price for the Merck KGaA Agreement of $21,325.

During the nine months ended September 30, 2020, the Company completed its performance obligations associated with one of the six designated targets. For the three months ended September 30, 2020 and 2019, and the nine months ended September 30, 2020 and 2019, the Company recorded collaboration revenue of $11, $800, $817, and $836, respectively, related to its efforts under the Merck KGaA Agreement. During the three and nine months ended

September 30, 2019, the Company recognized $34 and $1,255, respectively, in collaboration revenue and corresponding research and development expense of $34 and $1,255, respectively, related to the Merck KGaA Supply Agreement.

As of September 30, 2020 and December 31, 2019, the Company had $3,998 and $4,815, respectively, in deferred revenue related to the Merck KGaA Agreement and Merck KGaA Supply Agreement that will be recognized over the remaining performance period.

Takeda XMT-1522 Strategic Partnership

In January 2016, the Company entered into a Development Collaboration and Commercial License Agreement with Takeda's wholly owned subsidiary, Millennium Pharmaceuticals, Inc. for the development and commercialization of XMT-1522 (the XMT-1522 Agreement). Under the XMT-1522 Agreement, Takeda was granted the exclusive right to commercialize XMT-1522 outside of the United States and Canada. Under the XMT-1522 Agreement, the Company was responsible for conducting certain Phase 1 development activities for XMT-1522, including the ongoing Phase 1 clinical trial, at its own expense. The parties agreed to collaborate on the further development of XMT-1522 in accordance with a global development plan (Post-Phase 1 Development). On January 2, 2019, the Company received notice from Takeda stating that Takeda was exercising its right to terminate the XMT-1522 Agreement upon 30 days' prior written notice. The XMT-1522 Agreement terminated in accordance with its provisions, and the Company and Takeda wound down activities related to the XMT-1522 Agreement as of March 31, 2019. Under the XMT-1522 Agreement, the Company and Takeda shared equally all budgeted Post-Phase 1 Development costs through the date of termination and for a period of 30 days after the effective termination date.

For the applicable period within the three months ended March 31, 2019, the Company was billed $200 by Takeda, representing the Company's share of Post-Phase 1 Development costs incurred by Takeda. This amount has been reflected as research and development costs in the consolidated statement of operations.

Takeda strategic research and development partnership

In March 2014, the Company entered into a Research Collaboration and Commercial License Agreement with Takeda through Takeda's wholly owned subsidiary, Millennium Pharmaceuticals, Inc. (the 2014 Agreement). The 2014 Agreement was amended in January 2015 and amended and restated in January 2016 (the 2016 Restated Agreement). The agreements provided Takeda with the right to develop ADCs directed to a total of seven exclusive targets, designated by Takeda, over a specified period of time. On January 2, 2019, the Company received notice from Takeda stating that Takeda was exercising its right to terminate the 2016 Restated Agreement upon 45 days' prior written notice. The 2016 Restated Agreement terminated in accordance with its provisions, and the Company and Takeda wound down activities related to the 2016 Restated Agreement as of March 31, 2019.

During the applicable period within the three months ended March 31, 2019, the Company billed Takeda $195 related to ASC 808 costs.

Accounting Analysis

The Company's collaboration agreements with Takeda were terminated following receipt of written notices during the first quarter of 2019. As there are no further performance obligations, the Company recognized the remaining deferred revenue of $39,965 related to the termination of the Takeda agreements in the first quarter of 2019.

Included in accounts payable as of September 30, 2020 and December 31, 2019 was $2,335 related to the Takeda agreements.

Mersana Therapeutics, Inc.
Notes to condensed consolidated financial statements (continued)
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Summary of Contract Assets and Liabilities

The following table presents changes in the balances of our contract assets and liabilities during the nine months ended September 30, 2020 and 2019:

	Balance at Beginning of Period	Additions	Deductions	Balance at End of Period
Nine months ended September 30, 2020				
Contract assets	$ —	$ —	$ —	$ —
Contract liabilities:				
Deferred revenue	$ 4,815	$ —	$ 817	$ 3,998

	Balance at Beginning of Period	Additions	Deductions	Balance at End of Period
Nine months ended September 30, 2019				
Contract assets	$ —	$ —	$ —	$ —
Contract liabilities:				
Deferred revenue	$ 46,196	$ —	$ 41,550	$ 4,646

During the three and nine months ended September 30, 2020 and 2019, the Company recognized the following revenues as a result of changes in the contract asset and the contract liability balances in the respective periods:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Revenue recognized in the period from:				
Amounts included in the contract liability at the beginning of the period	$ 11	$ 834	$ 817	$ 41,550
Performance obligations satisfied in previous periods	$ —	$ —	$ —	$ —

Other Revenue

The Company has provided limited services for a collaboration partner, Asana BioSciences. For the three and nine months ended September 30, 2019, the Company recognized $10 and $25, respectively, of revenue related to these services. The Company did not recognize any revenue related to these services for the three and nine months ended September 30, 2020. The next potential milestone the Company is eligible to receive is $2,500 upon dosing the fifth patient in a Phase 1 clinical study by Asana BioSciences. As of September 30, 2020, the Company considers this next milestone to be fully constrained as there is considerable judgment involved in determining whether it is probable that a significant revenue reversal would occur. As part of its evaluation of the constraint, the Company considered numerous factors, including the fact that achievement of the milestone is outside the control of the Company and there is a high level of uncertainty in achieving this milestone, as this would require successful initiation of clinical trials by the collaboration partner. The Company reevaluates the probability of achievement of a milestone subject to constraint at each reporting period and as uncertain events are resolved or other changes in circumstances occur.

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4. Fair value measurements

The following table presents information about the Company's assets and liabilities regularly measured and carried at a fair value and indicates the level within fair value hierarchy of the valuation techniques utilized to determine such value as of December 31, 2019. The Company had no marketable securities as of September 30, 2020:

	Fair Value	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
December 31, 2019				
Marketable securities:				
Commercial paper	$ 11,940	$ —	$ 11,940	$ —
Corporate bonds	12,010	—	12,010	—
U.S. Treasuries	13,489	13,489	—	—
	$ 37,439	$ 13,489	$ 23,950	$ —

There were no changes in valuation techniques or transfers between fair value measurement levels during the nine months ended September 30, 2020 and 2019.

The carrying amounts reflected in the consolidated balance sheets for prepaid expenses and other current assets, accounts payable and accrued expenses approximate their fair values due to their short-term nature.

As of September 30, 2020, the carrying value of the Company’s outstanding borrowing under the Amended Credit Facility (as defined below) approximated fair value (a Level 2 fair value measurement), reflecting interest rates currently available to the Company. The Amended Credit Facility is discussed in more detail in Note 7, “Debt”.

5. Marketable securities

The following table summarizes marketable securities held at December 31, 2019. The Company had no marketable securities as of September 30, 2020:

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
December 31, 2019				
Commercial paper	$ 11,940	$ —	$ —	$ 11,940
Corporate bonds	11,990	20	—	12,010
U.S. Treasuries	13,484	5	—	13,489
	$ 37,414	$ 25	$ —	$ 37,439

Mersana Therapeutics, Inc.
Notes to condensed consolidated financial statements (continued)
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6. Accrued expenses

Accrued expenses consisted of the following as of September 30, 2020 and December 31, 2019:

	September 30, 2020	December 31, 2019
Accrued payroll and related expenses	$ 3,647	$ 4,037
Accrued preclinical, manufacturing and clinical expenses	6,600	4,230
Accrued professional fees and insurance	861	675
Accrued other	65	44
	$ 11,173	$ 8,986

7. Debt

On May 8, 2019, the Company entered into a loan and security agreement (the Original Agreement) with Silicon Valley Bank (SVB) pursuant to which the Company borrowed $5,000. The Original Agreement accrued interest at a floating per annum rate equal to the greater of (i) 4.0% and (ii) 1.50% below the Prime Rate. The Original Agreement had an interest-only period through August 31, 2020.

On August 28, 2020 (the Effective Date), the Company entered into a second amendment (the Amendment) to its existing loan and security agreement (as amended prior to the Amendment, the Existing Credit Facility) with SVB. Pursuant to the Amendment, the Company can borrow term loans in an aggregate amount of $30,000 (the Amended Credit Facility), at its option, (i) up to $25,000 in up to five principal advances through April 30, 2022, and (ii) an additional $5,000 in one principal advance, if the Company reaches certain development milestone events, as described in the Amendment, through April 30, 2022. The Company drew $5,200 upon execution of the Amendment, the proceeds of which were used to repay the Company’s existing balance and satisfy its obligations to SVB, including the final payment obligation under the Existing Credit Facility.

The Amended Credit Facility bears interest at a floating per annum rate equal to the greater of (i) 4.25% and (ii) 1.00% above the Prime Rate, as defined. The Company is obligated to make monthly interest-only payments on each outstanding term loan commencing on the first calendar day of the month following the funding date of such term loan, and continuing on the first calendar day of each month thereafter through May 31, 2022. The interest only period may be extended through January 31, 2023 upon the achievement of a regulatory milestone, as described in the Amendment. Following the interest-only period, the Company will be required to repay the outstanding principal balance under the term loans in equal monthly payments plus interest in arrears to SVB through November 1, 2024 (the Maturity Date).

The Company is also required to make a final payment to SVB equal to 5.5% of the original principal amount of the term loans then extended to the Company. This final payment is accreted under the effective interest method over the life of each term loan. The term loans are secured by substantially all of the Company's assets, except for its intellectual property which is subject to a negative pledge, and certain other customary exclusions.

At the Company’s option, it may prepay the outstanding principal balance of any term loans in whole but not in part, subject to a prepayment fee of: (a) 3.0% of the term loans then extended to the Company if the prepayment occurs on or prior to August 28, 2021, (b) 2.0% of the term loans then extended to the Company if the prepayment occurs after August 28, 2021 but on or prior to August 28, 2022, or (c) 1.0% of the term loans then extended to the Company if the prepayment occurs after August 28, 2022 but before November 1, 2024. The Amended Credit Facility includes customary affirmative and restrictive covenants applicable to the Company. Affirmative covenants include, among others, covenants requiring the Company to maintain its corporate existence and governmental approvals, deliver certain financial reports, maintain insurance coverage and satisfy certain requirements regarding

(in thousands, except share and per share data)

deposit accounts. The Amendment removed the requirement for the Company to maintain a minimum liquidity ratio. The restrictive covenants include, among others, requirements relating to the Company's ability to transfer collateral, incur additional indebtedness, engage in mergers or acquisitions, pay dividends or make other distributions, make investments, create liens, sell assets and agree to a change in control, in each case subject to certain customary exceptions.

The Company's payment obligations under the Amended Credit Facility are subject to acceleration upon the occurrence of specified events of default, which include, but are not limited to, the occurrence of a material adverse change in the Company's business, operations, or financial or other condition. Amounts outstanding upon the occurrence of an event of default are payable upon SVB's demand and shall accrue interest at an additional rate of 5.0% per annum of the past due amount outstanding. As of September 30, 2020, the Company was in compliance with all covenants under the Amended Credit Facility. As such, as of September 30, 2020, the classification of the loan balance as stated on the balance sheet was based on the timing of defined future payment obligations.

The unamortized issuance costs under the Existing Credit Facility were $139 as of the date of the Amendment. The Company incurred debt issuance costs paid to the lender in connection with the Amended Credit Facility of $17. The Company recorded such costs, including the settlement of the final payment obligation under the Existing Credit Facility as a discount from the carrying value of the term loans which are amortized as interest expense using the effective-interest method over the term of the Amended Credit Facility.

As of September 30, 2020, there was $5,200 in term loans outstanding under the Amended Credit Facility and the debt consisted of the following:

	September 30, 2020
Total debt	$ 5,200
Debt financing costs, net of accretion	(262)
Accretion related to final payment	6
Long-term debt, net	$ 4,944

As of September 30, 2020, the estimated future principal payments due are as follows:

2020 (excluding the nine months ended September 30, 2020)	$ —
2021	—
2022	1,213
2023	2,080
2024	1,907
Total debt	$ 5,200

During the three months ended September 30, 2020 and 2019, and the nine months ended September 30, 2020 and 2019, the Company recognized $60, $51, $173 and $64, respectively, of interest expense related to the Existing Credit Facility and Amended Credit Facility, as applicable.

8. Stockholders' equity

Preferred stock

As of September 30, 2020, the Company had 25,000,000 shares of authorized preferred stock. No shares of preferred stock have been issued.

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Notes to condensed consolidated financial statements (continued)
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At-the-market equity offering program

In July 2018, the Company established an at-the-market (ATM) equity offering program (the 2018 ATM) pursuant to which it offered and sold up to $75,000 of its common stock from time to time at prevailing market prices. In April 2020, the Company sold 8,938,599 and 1,962,000 shares of common stock at $5.59 per share and $7.74 per share, respectively, to raise aggregate gross proceeds of $65,153 through the 2018 ATM facility. Net proceeds to the Company after deducting fees, commissions and other expenses related to the offering were approximately $62,976.

In May 2020, the Company terminated the 2018 ATM and established a new ATM equity offering program (the 2020 ATM) pursuant to which it is able to sell up to $100,000 of its common stock from time to time at prevailing market prices. As of September 30, 2020, the Company had not sold any shares under the 2020 ATM.

Follow-on offering

In June 2020, the Company sold 9,200,000 shares of common stock, in an underwritten public offering price to the public of $19.00 per share, resulting in gross proceeds of approximately $174,800. Net proceeds to the Company after deducting fees, commissions and other expenses related to the offering were approximately $163,991.

Warrants

In connection with a 2013 Series A-1 Preferred Stock issuance, the Company granted to certain investors warrants to purchase 129,491 shares of common stock. The warrants have a $0.05 per share exercise price and a contractual life of 10 years. The fair value of these warrants was recorded as a component of equity at the time of issuance. As of September 30, 2020, there were warrants to purchase 39,474 shares of common stock.

Exchange warrants

On November 26, 2019, the Company entered into an exchange agreement with entities affiliated with Biotechnology Value Fund, L.P. (the Exchanging Stockholders), pursuant to which the Exchanging Stockholders exchanged an aggregate of 2,575,000 shares of common stock for warrants (the Exchange Warrants) to purchase an aggregate of 2,575,000 shares of common stock (subject to adjustment in the event of any stock dividends and splits, reverse stock split, merger or consolidation, change of control, reorganization or similar transaction, as described in the Exchange Warrants), with an exercise price of $0.0001 per share.

On March 2, 2020, the Exchanging Stockholders exercised the Exchange Warrants in full on a net cashless exercise basis, resulting in the issuance of 2,574,971 shares of common stock.

Common stock

The holders of the common stock are entitled to one vote for each share held. Common stockholders are not entitled to receive dividends, unless declared by the Board of Directors (the Board).

Mersana Therapeutics, Inc.
Notes to condensed consolidated financial statements (continued)
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At September 30, 2020 and December 31, 2019, there were 6,995,704 and 7,782,582, respectively, shares of common stock reserved for the exercise of outstanding stock options, restricted stock units and warrants, as follows:

	September 30, 2020	December 31, 2019
Stock options	6,215,368	4,720,772
Restricted stock units	740,862	447,336
Warrants	39,474	39,474
Exchange warrants	—	2,575,000
	6,995,704	7,782,582

9. Stock options

Stock option plans

In June 2017, the Company's stockholders approved the 2017 Stock Incentive Plan (the 2017 Plan). Under the 2017 Plan, up to 2,255,000 shares of common stock were initially available to be granted to the Company's employees, officers, directors, consultants and advisors in the form of options, restricted stock units (RSUs) or other stock-based awards. The number of shares of common stock issuable under the 2017 Plan will be cumulatively increased annually by 4% of the outstanding shares or such lesser amount specified by the Board. The terms of the awards are determined by the Board, subject to the provisions of the 2017 Plan. Any cancellations under the 2007 Plan, which expired in June 2017, would increase the number of shares that could be granted under the 2017 Plan. In January 2020, the number of shares of common stock issuable under the 2017 Plan was increased by 1,815,520 shares. As of September 30, 2020, there were 1,320,916 shares available for future issuance under the 2017 Plan. During the nine months ended September 30, 2020, the Company granted 2,165,306 RSUs and options to purchase shares of common stock to employees under the 2017 Plan.

Inducement awards

On September 2, 2020, the Company granted its senior vice president of regulatory affairs an option to purchase up to 120,000 shares of common stock as an inducement to employment in accordance with Nasdaq Listing Rule 5635(c)(4). No underwriters were involved in this issuance of securities. The securities were issued pursuant to Section 4(a)(2) under the Securities Act of 1933, as amended, relating to transactions by an issuer not involving any public offering. These options are subject to terms substantially the same as the 2017 Plan.

With respect to the stock option grants as described above, the exercise price per share will equal the fair market value of the common stock on the date of grant, and the vesting period is generally four years. Nonqualified stock options will be granted at an exercise price established by the Board at its sole discretion (which has not been less than fair market value on the date of grant) and the vesting periods may vary. Options granted as described above expire no later than 10 years from the date of grant. The Board may accelerate vesting or extend the expiration of granted options in the case of a merger, consolidation, dissolution, or liquidation of the Company.

Mersana Therapeutics, Inc.
Notes to condensed consolidated financial statements (continued)
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Stock option activity

A summary of the options activity under the Plans is as follows:

	Number of Shares	Weighted-Average Exercise Price
Outstanding at January 1, 2020	4,720,772	$ 5.24
Granted	1,960,374	9.41
Exercised	(338,069)	5.13
Cancelled	(127,709)	7.70
Outstanding at September 30, 2020	6,215,368	$ 6.52
Exercisable at September 30, 2020	3,256,514	$ 4.87

The weighted-average grant date fair value of options granted during the nine months ended September 30, 2020 and 2019, was $6.17 and $2.47 per share, respectively.

Cash received from the exercise of stock options was $1,732 and $121 for the nine months ended September 30, 2020 and 2019, respectively.

Restricted stock units (RSUs)

In July 2019, the Company issued RSUs with service conditions to employees. The awards cliff-vest two years after the grant date. In January 2020, the Company issued 324,932 RSUs with a service condition to employees for which the vesting term is annually over four years. Vesting of these awards is contingent on the fulfillment of the service conditions during the vesting term.

A summary of the RSU activity under the 2017 Plan is as follows:

	Number of Shares
Unvested at January 1, 2020	447,336
Granted	324,932
Vested	—
Forfeited	(31,406)
Unvested at September 30, 2020	740,862

Stock-based compensation expense

The Company uses the provisions of ASC 718, *Stock Compensation*, to account for all stock-based awards to employees and non-employees.

The measurement date for employee awards is generally the date of grant. Stock-based compensation expense is recognized over the requisite service period, which is generally the vesting period, using the straight-line method.

Mersana Therapeutics, Inc.
Notes to condensed consolidated financial statements (continued)
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The following table presents stock-based compensation expense by award type included within the Company's condensed consolidated statement of operations and comprehensive loss:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Stock options	$ 1,520	$ 1,055	$ 4,025	$ 3,240
Restricted stock units	335	184	962	184
Employee stock purchase plan	63	46	196	186
Stock-based compensation expense included in Total operating expenses	$ 1,918	$ 1,285	$ 5,183	$ 3,610

The following table presents stock-based compensation expense as reflected in the Company's condensed consolidated statements of operations and comprehensive loss:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Research and development	$ 952	$ 587	$ 2,554	$ 1,636
General and administrative	966	698	2,629	1,974
Stock-based compensation expense included in Total operating expenses	$ 1,918	$ 1,285	$ 5,183	$ 3,610

As of September 30, 2020, there was $15,007 and $2,269 of unrecognized stock compensation expense related to unvested stock options and unvested RSUs, respectively, that is expected to be recognized over a weighted-average period of 2.5 years and 2.6 years, respectively.

The fair value of each option award is estimated on the date of grant using the Black-Scholes option pricing model with the following weighted average assumptions:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Risk-free interest rate	0.4 %	1.9 %	1.3 %	2.4 %
Expected dividend yield	— %	— %	— %	— %
Expected term (years)	6.10	6.11	6.04	5.99
Expected stock price volatility	81 %	75 %	72 %	74 %

Employee Stock Purchase Plan

During the year ended December 31, 2017, the Board adopted, and the Company's stockholders approved the 2017 employee stock purchase plan (the 2017 ESPP). The Company initially reserved 225,000 shares of common stock for issuance under the 2017 ESPP. In January 2020, the number of shares of common stock for issuance under the 2017 ESPP was increased by 450,000 shares. For the nine months ended September 30, 2020 and 2019, the Company issued 68,419 and 82,281, respectively, shares under the 2017 ESPP. The Company did not issue any shares under the 2017 ESPP for the three months ended September 30, 2020 and 2019. As of September 30, 2020, there were 656,666 shares available for issuance under the 2017 ESPP.

Mersana Therapeutics, Inc.
Notes to condensed consolidated financial statements (continued)
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10. Leases

The Company has an operating lease for its office space in Cambridge, MA and operating and finance leases for certain equipment. In March 2020, the Company entered into the Seventh Amendment to the office space lease to extend the term of the lease through March 2026 and to provide the Company with a tenant improvement allowance of $172. The current rate per square foot that is in place through March 2021 (the original expiration date of the lease) did not change. After March 2021, there are predetermined fixed escalations of the rate as outlined in the amendment. The Company has an option to extend the lease term for an additional five years. The Company's exercise of this option was not considered reasonably certain as of September 30, 2020.

The extension is accounted for as a lease modification. The Company assessed the lease classification of the amended office space lease at the modification date and determined that the amended office space lease should be accounted for as an operating lease. The right-of-use asset and corresponding operating lease liability have been remeasured based on the present value of remaining lease payments over the remaining extended lease term, using the incremental borrowing rate applicable as of the lease modification date. The Company determined the appropriate incremental borrowing rate by using a synthetic credit rating which was estimated based on an analysis of outstanding debt of companies with similar credit and financial profiles. Since the operating lease is a net lease, as the non-lease components (i.e., common area maintenance) are paid separately from rent based on actual costs incurred, such non-lease components were not included in the right-of-use asset and liability and are reflected as an expense in the period incurred.

As a result of the modification in March 2020, the Company recorded an increase of $9,980 to its right-of-use (ROU) asset and lease liabilities in the first quarter of 2020.

Following the change, the Company's future minimum lease payments under non-cancellable leases as of September 30, 2020 were as follows:

	Operating leases	Finance leases
2020 (excluding the nine months ended September 30, 2020)	$ 604	$ 29
2021	2,772	116
2022	2,843	84
2023	2,928	74
2024 and thereafter	6,904	18
Total lease payments	16,051	321
Present value adjustment	(4,165)	(30)
Present value of lease liabilities	$ 11,886	$ 291

11. Commitments

License agreements

Through September 30, 2020, the Company had licensed intellectual property from three biotechnology companies. The consideration included upfront payments and a commitment to pay annual license fees, milestone payments and, upon product commercialization, royalties on revenue generated from the sale of products covered by the licenses. The Company recorded a $750 milestone payment for the dosing of the first patient in the XMT-1592 trial during the nine months ended September 30, 2020. The Company recorded a milestone payment of $600 during the three and nine months ended September 30, 2019 upon the dosing of the first patient in the expansion cohort of the XMT-1536 clinical trial. The Company did not record any milestone payments during the three months ended September 30, 2020.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our unaudited condensed consolidated financial statements and the accompanying notes appearing elsewhere in this Quarterly Report on Form 10-Q and the audited financial statements and the accompanying notes included in our Annual Report on Form 10-K for the year ended December 31, 2019 filed with the Securities and Exchange Commission (SEC) on February 28, 2020.

Our actual results and the timing of certain events may differ materially from the results discussed, projected, anticipated, or indicated in any forward-looking statements. We caution you that forward-looking statements are not guarantees of future performance and that our actual results of operations, financial condition and liquidity, and the development of the industry in which we operate may differ materially from the forward-looking statements contained in this Quarterly Report. In addition, even if our results of operations, financial condition and liquidity, and the development of the industry in which we operate are consistent with the forward-looking statements contained in this Quarterly Report, they may not be predictive of results or developments in future periods.

The following information and any forward-looking statements should be considered in light of factors discussed elsewhere in this Quarterly Report on Form 10-Q, in our Annual Report on Form 10-K for the year ended December 31, 2019, filed with the SEC on February 28, 2020, and in our Quarterly Report on Form 10-Q for the quarterly period ending March 31, 2020, filed with the SEC on May 8, 2020, including those risks identified under Item 1A. Risk Factors.

We caution readers not to place undue reliance on any forward-looking statements made by us, which speak only as of the date they are made. We disclaim any obligation, except as specifically required by law and the rules of the SEC, to publicly update or revise any such statements to reflect any change in our expectations or in events, conditions or circumstances on which any such statements may be based, or that may affect the likelihood that actual results will differ from those set forth in the forward-looking statements.

Overview

We are a clinical-stage biopharmaceutical company focused on developing antibody drug conjugates, or ADCs, that offer a clinically meaningful benefit for cancer patients with significant unmet need. We have leveraged 20 years of industry learning in the ADC field to develop proprietary and differentiated technology platforms that enable us to design ADCs to have improved efficacy, safety and tolerability relative to existing ADC therapies.

We believe that our innovative platforms which include Dolaflexin and Dolasynthen, each delivering our DolaLock payload, as well as Immunosynthen, delivering a novel stimulator of interferon genes, or STING, agonist, provide a highly-efficient product engine that has enabled a robust discovery pipeline for us and our partners. Our ADCs in preclinical and clinical studies are first-in-class molecules that target multiple tumor types with high unmet medical need and have exhibited improved safety and efficacy compared to ADCs developed using first-generation technology.

Our goal is to become a leading oncology company by leveraging the potential of our innovative and differentiated ADC technologies and the experience and competencies of our management team to identify, acquire and develop promising ADC product candidates and to commercialize cancer therapeutics that are improvements over existing treatments.

XMT-1536, a first-in-class ADC targeting the sodium-dependent phosphate transport protein NaPi2b, utilizes the Dolaflexin platform to deliver an average of 10 to 12 auristatin DolaLock payload molecules per antibody. The NaPi2b antigen is broadly expressed in non-small cell lung cancer, or NSCLC, adenocarcinoma and ovarian cancer with limited expression in normal tissue. We are actively recruiting and dosing patients with ovarian cancer and NSCLC adenocarcinoma, where a majority of patients express NaPi2b, in a Phase 1 clinical trial.

We have also selected our next clinical product candidate, XMT-1592. XMT-1592 uses one of our new platforms, Dolasynthen, and also targets NaPi2b. XMT-1592 comprises the same proprietary NaPi2b antibody and potent auristatin DolaLock payload with controlled bystander effect as XMT-1536, with the additional features of homogeneous, site-specific bioconjugation and precise drug-to-antibody ratio, or DAR. We filed an Investigational New Drug (IND) application in the first quarter of 2020 and initiated the Phase 1 dose escalation study of XMT-1592 in the second quarter of 2020.

Our early-stage programs include a potentially first-in-class B7-H4-targeted DolaLock ADC. Our objective is to rapidly progress through IND-enabling studies and scale up manufacturing activities with third parties. B7-H4 provides significant opportunities for development in areas of high unmet need such as breast cancer, NSCLC and ovarian cancer.

In addition, we have established strategic research and development partnerships with Merck KGaA and Asana Biosciences for the development and commercialization of additional ADC product candidates against a limited number of targets selected by our partners based on our Fleximer platform. We believe the potential of our ADC technologies, supported by our world-class management team and protected by our robust intellectual property portfolio, will allow us to develop targeted and highly tailored therapies to help cancer patients become cancer survivors.

Since inception, our operations have focused on such matters as building our platforms, identifying potential product candidates, producing drug substance and drug product material for use in preclinical studies, conducting preclinical and toxicology studies, manufacturing clinical study material and conducting clinical studies, establishing and protecting our intellectual property, staffing our company and raising capital. We do not have any products approved for sale and have not generated any revenue from product sales. We have funded our operations primarily through our strategic partnerships, private placements of our convertible preferred stock and public offerings of our common stock. In April 2020, we sold approximately 10.9 million shares of common stock and received net proceeds of $63.0 million. In addition, in June 2020, we sold 9.2 million shares of common stock and received net proceeds of $164.0 million.

Since inception, we have incurred significant cumulative operating losses. For the nine months ended September 30, 2020, the net loss was $59.2 million, compared to net loss of $12.0 million in the nine months ended September 30, 2019. The difference year over year is primarily attributable to $40.0 million in revenue that was recognized in the first quarter of 2019 as a result of the discontinuation of the partnership with Takeda in that quarter. As of September 30, 2020, we had an accumulated deficit of $251.6 million. We expect to continue to incur significant expenses and operating losses over the next several years. We anticipate that our expenses will increase significantly in connection with our ongoing activities, as we:

- continue clinical development activities for our lead product candidates XMT-1536 and XMT-1592;
- develop a research assay and companion diagnostic for the NaPi2b biomarker;
- continue activities to discover, validate and develop additional product candidates;
- maintain, expand and protect our intellectual property portfolio; and
- hire additional research, development and general and administrative personnel.

Impact of COVID-19 on Our Business

We are continuing to monitor the impact of the COVID-19 pandemic on our operations and ongoing clinical and preclinical development, as well as discovery efforts. Mitigation activities to minimize COVID-19-related operation disruptions are ongoing and include:

- In line with guidance from the U.S. Centers for Disease Control and Prevention (CDC) and the Commonwealth of Massachusetts, we have implemented work from home measures for all non-laboratory employees and have suspended all business travel. We have also prioritized laboratory activities and implemented staggered schedules in the interest of safety and efficiency for laboratory-based employees. We will continue to modify and adapt our measures to align with guidance as the pandemic evolves.

- We are currently enrolling patients at investigational sites in different geographic areas across the United States, Canada and Australia in the XMT-1536 Phase 1 study and within the United States in the XMT-1592 Phase 1 dose escalation study. We are in the process of initiating additional clinical sites both inside and outside the United States to increase enrollment, which could additionally mitigate potential regional impacts from COVID-19. Consistent with FDA guidance, we issued an administrative letter to allow for remote patient monitoring and remote testing, when possible.

- To the best of our knowledge, our contract manufacturing partners continue to operate their manufacturing facilities at or near normal levels, and we have not experienced any COVID-related delays in our manufacturing to date. We believe we have sufficient inventory of XMT-1536 and XMT-1592 to support our ongoing clinical studies. We have planned manufacturing runs to address all currently anticipated future needs. At this time, and subject to further COVID-19 implications, we do not anticipate any disruptions to our clinical supply.

The ultimate impact of the coronavirus pandemic on our business operations is highly uncertain and subject to change and will depend on future developments, which cannot be accurately predicted. While the pandemic did not materially affect our financial results and business operations in the third quarter ended September 30, 2020, we are unable to predict the impact that COVID-19 will have on our financial position and operating results in future periods due to numerous uncertainties. Management is actively monitoring this situation and the possible effects on our financial condition, operations, suppliers, industry, and our employees. For additional information about risks and uncertainties related to the COVID-19 pandemic that may impact our business, our financial condition or our results of operations, see “Part II, Item 1A—Risk Factors” below in the Company’s Quarterly Report on Form 10-Q for the quarter ended March 31, 2020, filed on May 8, 2020.

Financial operations overview

Revenue

To date, we have not generated any revenue from the sale of products. All of our revenue has been generated from strategic partnerships.

In June 2014, we entered into an agreement with Merck KGaA for the development and commercialization of ADC product candidates utilizing Fleximer for up to six target antigens. Merck KGaA is responsible for generating antibodies against the target antigens and we are responsible for generating Fleximer and our proprietary payloads and conjugating this to the antibody to create the ADC product candidates. Merck KGaA has the exclusive right to and is responsible for the further development and commercialization of these ADC product candidates. In May 2018, we entered into a supply agreement with Merck KGaA for the supply of materials that could be used for IND-enabling studies and clinical trials.

For the three months ended September 30, 2020 we recognized an immaterial amount of revenue related to the Merck KGaA Agreements. For the nine months ended September 30, 2020 we recognized revenue of $0.8 million and for the three and nine months ended September 30, 2019, we recognized $0.8 million and $2.1 million, respectively, of revenue related to the Merck KGaA agreements.

In January 2016, we entered into collaboration agreements with Takeda for the development and commercialization of XMT-1522, a HER2-targeted ADC, and up to seven ADC product candidates utilizing Fleximer. Our collaboration agreements with Takeda were terminated during the first quarter of 2019. We recognized the

remaining deferred revenue of $40.0 million related to the termination of the Takeda agreements in the first quarter of 2019. We do not expect to have any further revenue related to these agreements.

We have provided limited services to Asana BioSciences. For the three and nine months ended September 30, 2019 we recorded an immaterial amount of revenue related to these services. We did not record any revenue related to these services in the three and nine months ended September 30, 2020.

For the foreseeable future, we expect substantially all of our revenue to be generated from our collaboration agreements with Merck KGaA and Asana BioSciences. Given the uncertain nature and timing of clinical development, we cannot predict when or whether we will receive further milestone payments or any royalty payments under these collaborations.

Operating expenses

Research and development expenses

Research and development expenses consist primarily of costs incurred for our research and development activities, including our drug discovery efforts, and the development of our product candidates, which include:

- employee-related expenses, including salaries, bonuses, benefits and stock-based compensation expense;
- costs of funding research and development performed by third parties that conduct research, preclinical activities, manufacturing and clinical trials on our behalf;
- laboratory supplies;
- facility costs, including rent, depreciation and maintenance expenses; and
- upfront and milestone payments under our third-party licensing agreements.

Research and development costs are expensed as incurred. Costs of certain activities, such as manufacturing and preclinical and clinical studies, are generally recognized based on an evaluation of the progress to completion of specific tasks. Costs for certain development activities, such as clinical studies, are recognized based on an evaluation of the progress to completion of specific tasks using data such as patient enrollment, clinical site activations and information provided to us by the third parties with whom we contract.

Research and development activities are central to our business model. Product candidates in later stages of clinical development generally have higher development costs than those in earlier stages of clinical development, primarily due to the increased size and duration of later-stage clinical trials and manufacturing costs. We expect that our total future research and development costs will continue to increase over current levels, depending on the progress of our clinical development programs. There are numerous factors associated with the successful development and commercialization of any of our product candidates, including future trial design and various regulatory requirements, many of which cannot be determined with accuracy at our current stage of development. Additionally, future commercial and regulatory factors beyond our control may impact our clinical development programs and plans.

A significant portion of our research and development costs have been external costs, which we track on a program-by-program basis following nomination as a product candidate. We have not historically tracked all of our internal research and development expenses on a program-by-program basis as they are deployed across multiple projects under development. The following table summarizes our external research and development expenses, by program, following nomination as a development candidate for the three and nine months ended September 30, 2020 and 2019. All external research and development expenses not attributable to the XMT-1536, XMT-1592 and XMT-1522 programs are captured within preclinical and discovery costs. These costs relate to XMT-1592 prior to its designation in early 2020 as our next ADC clinical candidate, as well as additional earlier discovery stage

programs and certain unallocated costs. We terminated the development of XMT-1522 in the first quarter of 2019. Our internal research and development costs are primarily personnel-related costs, stock-based compensation costs, and facility costs, including depreciation, and lab consumables.

(in thousands)	Three Months Ended September 30, 2020	Three Months Ended September 30, 2019	Nine Months Ended September 30, 2020	Nine Months Ended September 30, 2019
XMT-1536 external costs	$ 4,451	$ 2,193	$ 10,356	$ 6,801
XMT-1592 external costs	1,149	—	4,994	—
XMT-1522 external costs	—	305	—	2,267
Preclinical and discovery costs	3,348	4,994	6,878	13,383
Internal research and development costs	7,598	6,209	21,951	20,159
Total research and development costs	$ 16,546	$ 13,701	$ 44,179	$ 42,610

The successful development of our product candidates is highly uncertain. As such, we cannot reasonably estimate or know the nature, timing and estimated costs of the efforts that will be necessary to complete the remainder of the development of our product candidates. We are also unable to predict when, if ever, material net cash inflows will commence from the development efforts associated with our product candidates. This is due to the numerous risks and uncertainties associated with developing drugs, including the uncertainty of:

- successful completion of preclinical studies and IND-enabling studies;
- successful enrollment in and completion of clinical trials;
- receipt of marketing approvals from applicable regulatory authorities;
- establishing commercial manufacturing capabilities or making arrangements with third-party manufacturers;
- obtaining and maintaining patent and trade secret protection and regulatory exclusivity for our product candidates;
- commercializing the product candidates, if and when approved, whether alone or in collaboration with others; and
- continued acceptable safety profile of the drugs following approval.

A change in the outcome of any of these or other variables with respect to the development, manufacture or commercialization of any of our product candidates would significantly change the costs, timing and viability associated with the development of that product candidate.

General and administrative expenses

General and administrative expenses consist primarily of salaries and other employee-related costs, including stock-based compensation, for personnel in executive, finance, accounting, business development, legal operations, information technology and human resources functions. Other significant costs include facility costs not otherwise included in research and development expenses, legal and other fees relating to patent and corporate matters, and fees for accounting and consulting services.

We anticipate that our general and administrative expenses will increase in the future to support continued research and development activities, including increased costs related to the hiring of additional personnel, fees to outside consultants and patent costs, among other expenses.

Other income (expense)

Other income (expense) consists primarily of interest income earned on cash equivalents and marketable securities. Interest expense is related to borrowings under the credit facility that we entered into in May 2019 and amended in August 2020. These borrowings bear a floating per annum rate interest, as well as a final payment of 5.5% of the amounts drawn, that is being recorded as interest expense over the term through the maturity date using the effective-interest method. Also included in interest expense is the amortization of the deferred financing costs and the accretion of debt discount relating to the credit facility.

Results of Operations

Comparison of the three months ended September 30, 2020 and 2019

The following table summarizes our results of operations for the three months ended September 30, 2020 and 2019:

	Three Months Ended September 30,		
(in thousands)	**2020**	**2019**	**Dollar Change**
Collaboration revenue	$ 11	$ 844	$ (833)
Operating expenses:			
Research and development	16,546	13,701	2,845
General and administrative	5,881	4,436	1,445
Total operating expenses	22,427	18,137	4,290
Other income (expense):			
Interest income	19	608	(589)
Interest expense	(92)	(107)	15
Total other income (expense), net	(73)	501	(574)
Net loss	$ (22,489)	$ (16,792)	$ (5,697)

Collaboration Revenue

Collaboration revenue was immaterial during the three months ended September 30, 2020 and $0.8 million during the three months ended September 30, 2019. The decrease in collaboration revenue was primarily a result of the completion of research services associated with a target included in the Merck KGaA Agreement during the three months ended September 30, 2019.

Research and Development Expense

Research and development expense increased by $2.8 million from $13.7 million for the three months ended September 30, 2019 to $16.5 million for the three months ended September 30, 2020.

The increase in research and development expense was primarily attributable to the following:

- an increase of $2.7 million related to manufacturing, clinical and regulatory activities for XMT-1536;
- an increase of $1.1 million related to employee compensation, primarily due to increased headcount supporting the growth of our research and development activities, and the increase in valuation of stock-based awards granted to employees, resulting in higher stock-based compensation expense;
- an increase of $0.5 million related to manufacturing activities for our discovery stage programs;

- an increase of $0.4 million related to XMT-1592 clinical expenses;
- an increase of $0.4 million related to consulting and professional fees; and
- an increase of $0.2 million related to advancement of companion diagnostic development efforts for the NaPi2B biomarker.

These increased costs were partially offset by the following:

- a decrease of $2.3 million related to preclinical development and manufacturing activities for XMT-1592; and
- a decrease of $0.2 million related to the development and manufacturing activities for XMT-1522.

We expect our research and development expenses to increase as we continue our clinical development of XMT-1536 and XMT-1592 and continue to advance our preclinical product candidate pipeline and invest in improvements in our ADC technologies.

General and Administrative Expense

General and administrative expense increased by $1.4 million from $4.4 million during the three months ended September 30, 2019 to $5.9 million during the three months ended September 30, 2020. The increase in general and administrative expense was primarily attributable to the following:

- an increase of $0.9 million related to consulting and professional fees;
- an increase of $0.3 million related to employee compensation, primarily due to the increase in valuation of stock-based awards granted to employees, resulting in higher stock-based compensation expense; and
- an increase of $0.2 million in facility-related costs as a result of the amendment of our lease in March 2020.

We expect that our general and administrative expense will increase in future periods as we expand our operations. These increases will likely include legal, auditing and filing fees, additional insurance premiums and general compliance and consulting expenses.

Total Other Income (Expense), net

Total other income (expense), net was $0.1 million and $0.5 million for the three months ended September 30, 2020 and 2019, respectively. Other income consists primarily of interest income on cash equivalents and short-term marketable securities. Interest expense related to our outstanding borrowings under the credit facility.

Comparison of the nine months ended September 30, 2020 and 2019

The following table summarizes our results of operations for the nine months ended September 30, 2020 and 2019:

(in thousands)	Nine Months Ended September 30, 2020	2019	Dollar Change
Collaboration revenue	$ 817	$ 42,081	$ (41,264)
Operating expenses:			
Research and development	44,179	42,610	1,569
General and administrative	15,988	13,072	2,916
Total operating expenses	60,167	55,682	4,485
Other income (expense):			
Interest income	414	1,785	(1,371)
Interest expense	(267)	(146)	(121)
Total other income (expense), net	147	1,639	(1,492)
Net income (loss)	$ (59,203)	$ (11,962)	$ (47,241)

Collaboration Revenue

Collaboration revenue was $0.8 million during the nine months ended September 30, 2020 and $42.1 million during the nine months ended September 30, 2019. The decrease in collaboration revenue was primarily a result of the termination of the Takeda agreements and the recognition of the remaining deferred revenue of $40.0 million in the first quarter of 2019. During the nine months ended September 30, 2020 revenue of $0.8 million was recognized as a result of completion of research services associated with a target included in the Merck KGaA Agreement. Additionally, during the nine months ended September 30, 2019, collaboration revenue of $1.0 million was recognized related to the Merck KGaA Agreement and Merck KGaA Supply Agreement.

Research and Development Expense

Research and development expense increased by $1.6 million from $42.6 million for the nine months ended September 30, 2019 to $44.2 million for the nine months ended September 30, 2020.

The increase in research and development expense was primarily attributable to the following:

- an increase of $3.7 million related to manufacturing, clinical and regulatory activities for XMT-1536;
- an increase of $1.8 million related to employee compensation, primarily due to increased headcount supporting the growth of our research and development activities, and the increase in valuation of stock-based awards granted to employees, resulting in higher stock-based compensation expense;
- an increase of $1.3 million related to XMT-1592 clinical and regulatory expenses;
- an increase of $0.8 million related to consulting and professional fees;
- an increase of $0.7 million related to advancement of companion diagnostic development efforts for the NaPi2B biomarker;
- an increase of $0.6 million related to manufacturing activities for our discovery stage programs; and
- an increase of $0.4 million related to a milestones paid for in-licensed technologies.

These increased costs were partially offset by the following:

- a decrease of $4.8 million related to preclinical development and manufacturing activities for XMT-1592;
- a decrease of $2.0 million related to the development and manufacturing activities for XMT-1522; and
- a decrease of $0.9 million to support partner programs.

We expect our research and development expenses to increase as we continue our clinical development of XMT-1536 and XMT-1592 and continue to advance our preclinical product candidate pipeline and invest in improvements in our ADC technologies.

General and Administrative Expense

General and administrative expense increased by $2.9 million from $13.1 million during the nine months ended September 30, 2019 to $16.0 million during the nine months ended September 30, 2020. The increase in general and administrative was primarily attributable to the following:

- an increase of $1.6 million related to consulting and professional fees;
- an increase of $1.0 million related to employee compensation, primarily due to the increase in valuation of stock-based awards granted to employees, resulting in higher stock-based compensation expense; and
- an increase of $0.3 million in facility-related costs as a result of the amendment of our lease in March 2020.

We expect that our general and administrative expense will increase in future periods as we expand our operations. These increases will likely include legal, auditing and filing fees, additional insurance premiums and general compliance and consulting expenses.

Total Other Income (Expense), net

Total other income (expense), net was $0.1 million and $1.6 million for the nine months ended September 30, 2020 and 2019, respectively. Other income consists primarily of interest income on cash equivalents and short-term marketable securities. Interest expense was related to our outstanding borrowings under the credit facility.

Liquidity and Capital Resources

Sources of Liquidity

Since our initial public offering in July 2017, we have financed our operations primarily with the proceeds from our initial public offering, our follow-on public offerings and use of our at-the-market, or ATM, equity offering program established in July 2018. We completed a follow-on public offering on March 5, 2019 that resulted in net proceeds of $92.2 million. On May 8, 2019, we entered into a term-loan agreement which was subsequently amended on August 28, 2020. Pursuant to the amendment, we may be subject to certain conditions, borrow term loans in an aggregate amount of up to $30.0 million, of which $5.2 million were funded upon execution of the amendment. These proceeds were used to repay the existing balance and satisfy our existing obligations to Silicon Valley Bank, or SVB. No additional amounts have been drawn since the initial draw of $5.2 million.

In April 2020, we sold approximately 10.9 million shares of common stock and received net proceeds of $63.0 million pursuant to our 2018 ATM. In addition, in June 2020, we sold 9.2 million shares of common stock in a follow-on offering and received net proceeds of approximately $164.0 million.

We terminated the 2018 ATM on April 9, 2020. On May 8, 2020, we established a new ATM pursuant to which we are able to sell $100.0 million of our common stock from time to time at prevailing market prices, or the 2020 ATM.

As of September 30, 2020, we had not sold any shares under the 2020 ATM and had $100.0 million of availability under the program.

As of September 30, 2020, we had cash and cash equivalents of $270.9 million.

Cash Flows

The following table provides information regarding our cash flows for the nine months ended September 30, 2020 and 2019:

	Nine Months Ended September 30,	
(in thousands)	**2020**	**2019**
Net cash used in operating activities	$ (57,377)	$ (55,168)
Net cash provided by (used in) investing activities	37,215	(43,793)
Net cash provided by financing activities	228,747	97,473
Increase (decrease) in cash, cash equivalents and restricted cash	$ 208,585	$ (1,488)

Net Cash Used in Operating Activities

Net cash used in operating activities was $57.4 million for the nine months ended September 30, 2020 and primarily consisted of a net loss of $59.2 million adjusted for changes in our net working capital and other non-cash items including stock-based compensation of $5.2 million and depreciation of $0.8 million. Net cash used in operating activities was $55.2 million for the nine months ended September 30, 2019 and primarily consisted of a net loss of $12.0 million adjusted for non-cash items including the decrease in deferred revenue of $41.6 million primarily related to the Takeda agreements, stock-based compensation of $3.6 million and depreciation of $1.0 million, as well as change in our net working capital.

Net Cash Provided by (Used in) Investing Activities

Net cash provided by investing activities was $37.2 million during the nine months ended September 30, 2020 and consisted primarily of maturities of marketable securities. Net cash used in investing activity was $43.8 million during the nine months ended September 30, 2019 and consisted primarily of purchases of marketable securities, slightly offset by the maturity of marketable securities.

Net Cash Provided by Financing Activities

Net cash provided by financing activities was $228.7 million during the nine months ended September 30, 2020 as compared to net cash provided by financing activities of $97.5 million during the nine months ended September 30, 2019. During the nine months ended September 30, 2020 cash provided by financing activities consisted primarily of $164.0 million related to the follow-on public offering in May 2020 and the proceeds from the use of the ATM of $63.0 million in April 2020 as well as proceeds from exercise of stock options of $1.7 million, offset by the payment of $0.2 million of debt. During the nine months ended September 30, 2019 cash provided by financing activities consisted primarily of the proceeds from our follow-on public offering.

Funding Requirements

We expect our cash expenditures to increase in connection with our ongoing activities, particularly as we continue the research and development of, initiate clinical studies of, and seek marketing approval for our product candidates. In addition, if we obtain marketing approval for any of our product candidates, we expect to incur significant commercialization expenses related to drug sales, marketing, manufacturing and distribution to the extent that such sales, marketing and distribution are not the responsibility of potential collaborators.

We believe our currently available funds will be sufficient to fund our existing cash flow requirements and our current operating plan commitments for more than two years. Our forecast of the period of time through which our financial resources will be adequate to support our operations is a forward-looking statement and involves risks and uncertainties, and actual results could vary as a result of a number of factors. We have based this estimate on assumptions that may prove to be wrong, and we could utilize our available capital resources sooner than we currently expect. Our future capital requirements will depend on many factors, including:

- the scope, progress, results and costs of drug discovery, preclinical development, laboratory testing and clinical studies for our product candidates;
- the scope, prioritization and number of our research and development programs;
- the costs, timing and outcome of regulatory review of our product candidates;
- our ability to establish and maintain collaborations on favorable terms, if at all;
- the achievement of milestones or occurrence of other developments that trigger payments under any collaboration agreements we obtain;
- the extent to which we are obligated to reimburse, or entitled to reimbursement of, clinical study costs under future collaboration agreements, if any;
- the costs of preparing, filing and prosecuting patent applications, maintaining and enforcing our intellectual property rights and defending intellectual property-related claims;
- the extent to which we acquire or in-license other product candidates and technologies;
- the costs of securing manufacturing arrangements for clinical and commercial production; and
- the costs of establishing or contracting for sales and marketing capabilities if we obtain regulatory approvals to market our product candidates.

Identifying potential product candidates and conducting preclinical testing and clinical studies is a time-consuming, expensive and uncertain process that takes many years to complete, and we may never generate the necessary data or results required to obtain marketing approval and achieve drug sales. In addition, our product candidates, if approved, may not achieve commercial success. Our commercial revenues, if any, will be derived from sales of drugs that we do not expect to be commercially available for many years, if at all. Accordingly, we will need to continue to rely on additional financing to achieve our business objectives. Adequate additional financing may not be available to us on acceptable terms, or at all.

Until such time, if ever, as we can generate substantial product revenues, we expect to finance our cash needs through a combination of equity offerings, debt financings, strategic partnerships and licensing arrangements. To the extent that we raise additional capital through the sale of equity or convertible debt securities, the ownership interests of our common stockholders will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect the rights of our common stockholders. We have access to an additional line of credit under the credit facility with SVB, along with funds to be earned in connection with our agreements with Merck KGaA and Asana BioSciences, if development activities are successful under those agreements. Future additional debt financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends.

If we raise funds through additional strategic partnerships or licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs or product candidates or to grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds through equity or debt financings when needed, we may be required to delay, limit, reduce or terminate our drug development or

future commercialization efforts or grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves.

Off-Balance Sheet Arrangements

We did not have, during the periods presented, and we do not currently have, any off-balance sheet arrangements, as defined under applicable Securities and Exchange Commission rules.

Critical accounting policies and significant judgments and estimates

Our management's discussion and analysis of our financial condition and results of operations are based on our financial statements, which have been prepared in accordance with U.S. generally accepted accounting principles. The preparation of these financial statements requires us to make judgments and estimates that affect the reported amounts of assets, liabilities, revenues, and expenses and the disclosure of contingent assets and liabilities in our financial statements. We base our estimates on historical experience, known trends and events, and various other factors that are believed to be reasonable under the circumstances. Actual results may differ from these estimates under different assumptions or conditions. On an ongoing basis, we evaluate our judgments and estimates in light of changes in circumstances, facts and experience. The effects of material revisions in estimates, if any, will be reflected in the financial statements prospectively from the date of change in estimates. There were no material changes to our critical accounting policies as reported in our Annual Report on Form 10-K for the year ended December 31, 2019, which was filed with the SEC on February 28, 2020.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

We are exposed to market risk-related to changes in interest rates. Our primary exposure to market risk is interest rate sensitivity, which is affected by changes in the general level of U.S. interest rates, particularly because our investments, including cash equivalents and marketable securities are invested in U.S. Treasury obligations, commercial paper and corporate bonds. However, we believe that due to the short-term duration of our investment portfolio and low-risk profile of our investments, an immediate 100 basis points change in interest rates would not have a material effect on the fair market value of our investments portfolio.

We are currently not exposed to market risk related to changes in foreign currency exchange rates, but we may contract with vendors that are located in Asia and Europe and may be subject to fluctuations in foreign currency rates at that time.

Item 4. Controls and Procedures

Management's Evaluation of our Disclosure Controls and Procedures

We maintain "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the Exchange Act), that are designed to ensure that information required to be disclosed in the reports that we file or submit under the Exchange Act is (i) recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms and (ii) accumulated and communicated to our management, including our principal executive and principal financial officer, as appropriate to allow timely decisions regarding required disclosure. Our management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and our management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Our disclosure controls and procedures are designed to provide reasonable assurance of achieving their control objectives.

Our management, with the participation of our principal executive officer and principal financial officer, has evaluated the effectiveness of our disclosure controls and procedures as of September 30, 2020, the end of the period covered by this Quarterly Report on Form 10-Q. Based upon such evaluation, our principal executive officer and principal financial officer have concluded that our disclosure controls and procedures were effective at the reasonable assurance level as of such date.

Changes in Internal Control over Financial Reporting

There was no change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) that occurred during the quarter ended September 30, 2020 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II - OTHER INFORMATION

Item 1. Legal Proceedings

From time to time, we may be subject to various legal proceedings and claims that arise in the ordinary course of our business activities. Although the results of litigation and claims cannot be predicted with certainty, as of the date of this Quarterly Report on Form 10-Q, we do not believe we are party to any claim or litigation, the outcome of which, if determined adversely to us, would individually or in the aggregate be reasonably expected to have a material adverse effect on our business. Regardless of the outcome, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management resources and other factors.

Item 1A. Risk Factors

Risk Factors

There have been no material changes to the Company's risk factors as set forth in Part I, Item 1A of the Company's Annual Report on Form 10-K, as filed with the SEC on February 28, 2020, other than those set forth in "Part II, Item 1A—Risk Factors" in our Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2020, as filed with the SEC on May 8, 2020.

Item 6. Exhibits.

EXHIBIT 3.1	- Fifth Amended and Restated Certificate of Incorporation (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K, filed on July 10, 2017).
EXHIBIT 3.2	- Amended and Restated Bylaws (incorporated by reference to Exhibit 3.2 to the Company's Current Report on Form 8-K, filed on July 10, 2017).
EXHIBIT 10.1	Second Amendment to Loan and Security Agreement, dated August 28, 2020, by and between Mersana Therapeutics, Inc., and Silicon Valley Bank (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, filed on September 3,2020).
EXHIBIT 31.1	- Rule 13a—14(a) / 15d—14(a) Certifications — Chief Executive Officer.
EXHIBIT 31.2	- Rule 13a—14(a) / 15d—14(a) Certifications — Principal Financial Officer.
EXHIBIT 32.1	- Section 1350 Certifications.
EXHIBIT 101	- The following financial and related information from Mersana Therapeutics, Inc.'s Quarterly Report on Form 10-Q for the quarter ended September 30, 2020, formatted in Inline eXtensible Business Reportable Language (iXBRL) includes: (i) the Condensed Consolidated Balance Sheet; (ii) the Condensed Consolidated Statement of Operations and Comprehensive Income (Loss); (iii) the Condensed Consolidated Statement of Changes in Stockholders' Equity; (iv) the Condensed Consolidated Statement of Cash Flows; and, (v) Notes to Condensed Consolidated Financial Statements.
EXHIBIT 104	- The cover page from the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2020, formatted in Inline XBRL (contained in Exhibit 101).

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.

Mersana Therapeutics, Inc.

Dated: November 9, 2020

By: /s/ Anna Protopapas
Anna Protopapas
President and Chief Executive Officer

Dated: November 9, 2020

By: /s/ Brian DeSchuytner
Brian DeSchuytner
Senior Vice President, Finance & Product Strategy

Exhibit 31.1

Certification of Principal Executive Officer pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of Sarbanes-Oxley Act of 2002

I, Anna Protopapas, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Mersana 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.

Mersana Therapeutics, Inc.

/s/ Anna Protopapas

Anna Protopapas

President and Chief Executive Officer
(Principal Executive Officer)

Dated: November 9, 2020

Exhibit 31.2

Certification of Principal Financial Officer pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of Sarbanes-Oxley Act of 2002

I, Brian DeSchuytner, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Mersana 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.

Mersana Therapeutics, Inc.

/s/ Brian DeSchuytner

Brian DeSchuytner

Senior Vice President, Finance & Product Strategy
(Principal Financial Officer)

Dated: November 9, 2020

Exhibit 32.1

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report on Form 10-Q of Mersana Therapeutics, Inc. (the "Company") for the quarter ended September 30, 2020 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), each of the undersigned officers of the company, hereby certifies, pursuant to Section 1350 of Chapter 63 of Title 18, United States Code, that to the best of her or his knowledge:

1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

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

Dated: November 9, 2020

/s/ Anna Protopapas

Anna Protopapas

President and Chief Executive Officer
(Principal Executive Officer)

Dated: November 9, 2020

/s/ Brian DeSchuytner

Brian DeSchuytner

Senior Vice President, Finance & Product Strategy
(Principal Financial Officer)