UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

FORM 10-Q

(Mark One)

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

For the quarterly period ended September 30, 2023

OR

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

For the transition period from _____ to _____

Commission File Number: 001-40602

ERASCA, INC.

(Exact Name of Registrant as Specified in its Charter)

Delaware	**83-1217027**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
3115 Merryfield Row, Suite 300 San Diego, CA	**92121**
(Address of principal executive offices)	**(Zip Code)**

Registrant's telephone number, including area code: (858) 465-6511

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 per share	ERAS	Nasdaq Global Select Market

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

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, 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 ☑

As of November 2, 2023, the registrant had 151,087,038 shares of common stock outstanding.

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Item 1. Financial Statements.

Erasca, Inc.
Condensed Consolidated Balance Sheets
(In thousands, except share and par value amounts)
(Unaudited)

	September 30, 2023	December 31, 2022
Assets		
Current assets:		
Cash and cash equivalents	$ 112,862	$ 284,217
Short-term marketable securities	183,806	151,403
Prepaid expenses and other current assets	9,298	8,876
Total current assets	305,966	444,496
Long-term marketable securities	46,891	—
Property and equipment, net	23,229	24,815
Operating lease assets	38,524	40,418
Restricted cash	408	408
Other assets	4,388	4,772
Total assets	$ 419,406	$ 514,909
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	$ 3,701	$ 23,049
Accrued expenses and other current liabilities	19,211	24,336
Operating lease liabilities	3,818	1,305
Total current liabilities	26,730	48,690
Operating lease liabilities, net of current portion	52,940	53,793
Other liabilities	761	573
Total liabilities	80,431	103,056
Commitments and contingencies (Note 11)		
Stockholders' equity:		
Preferred stock, $0.0001 par value; 80,000,000 shares authorized at September 30, 2023 and December 31, 2022; no shares issued and outstanding at September 30, 2023 and December 31, 2022	—	—
Common stock, $0.0001 par value; 800,000,000 shares authorized at September 30, 2023 and December 31, 2022; 151,053,118 and 150,448,363 shares issued at September 30, 2023 and December 31, 2022, respectively; 150,537,752 and 149,333,258 shares outstanding at September 30, 2023 and December 31, 2022, respectively	15	15
Additional paid-in capital	915,847	893,850
Accumulated other comprehensive loss	(575)	(1,041)
Accumulated deficit	(576,312)	(480,971)
Total stockholders' equity	338,975	411,853
Total liabilities and stockholders' equity	$ 419,406	$ 514,909

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

Erasca, Inc.
Condensed Consolidated Statements of Operations and Comprehensive Loss
(In thousands, except share and per share amounts)
(Unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Operating expenses:				
Research and development	$ 25,213	$ 28,184	$ 79,016	$ 83,101
In-process research and development	—	—	—	2,000
General and administrative	9,445	8,778	28,637	24,271
Total operating expenses	34,658	36,962	107,653	109,372
Loss from operations	(34,658)	(36,962)	(107,653)	(109,372)
Other income (expense)				
Interest income	4,346	1,522	12,474	2,024
Other expense	(49)	(49)	(162)	(207)
Total other income (expense), net	4,297	1,473	12,312	1,817
Net loss	$ (30,361)	$ (35,489)	$ (95,341)	$ (107,555)
Net loss per share, basic and diluted	$ (0.20)	$ (0.29)	$ (0.64)	$ (0.90)
Weighted-average shares of common stock used in computing net loss per share, basic and diluted	150,450,201	120,798,322	150,000,613	120,166,023
Other comprehensive income (loss):				
Unrealized gain (loss) on marketable securities, net	218	(156)	466	(1,217)
Comprehensive loss	$ (30,143)	$ (35,645)	$ (94,875)	$ (108,772)

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

Erasca, 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	Total Stockholders' Equity
	Shares	Amount				
Balance at December 31, 2022	150,448,363	$ 15	$ 893,850	$ (1,041)	$ (480,971)	$ 411,853
Exercise of stock options	199,344	—	183	—	—	183
Vesting of early exercised stock options	—	—	243	—	—	243
Stock-based compensation expense	—	—	6,845	—	—	6,845
Net loss	—	—	—	—	(33,199)	(33,199)
Unrealized gain on marketable securities, net	—	—	—	527	—	527
Balance at March 31, 2023	150,647,707	$ 15	$ 901,121	$ (514)	$ (514,170)	$ 386,452
Exercise of stock options	170,715	—	122	—	—	122
Issuance of common stock under the Employee Stock Purchase Plan	223,696	—	527	—	—	527
Vesting of early exercised stock options	—	—	652	—	—	652
Stock-based compensation expense	—	—	7,012	—	—	7,012
Net loss	—	—	—	—	(31,781)	(31,781)
Unrealized loss on marketable securities, net	—	—	—	(279)	—	(279)
Balance at June 30, 2023	151,042,118	$ 15	$ 909,434	$ (793)	$ (545,951)	$ 362,705
Exercise of stock options	11,000	—	7	—	—	7
Vesting of early exercised stock options	—	—	168	—	—	168
Stock-based compensation expense	—	—	6,238	—	—	6,238
Net loss	—	—	—	—	(30,361)	(30,361)
Unrealized gain on marketable securities, net	—	—	—	218	—	218
Balance at September 30, 2023	151,053,118	$ 15	$ 915,847	$ (575)	$ (576,312)	$ 338,975

Erasca, Inc.
Condensed Consolidated Statements of Stockholders' Equity - Continued
(In thousands, except share data)
(Unaudited)

	Common Stock		Additional Paid-in Capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount				
Balance at December 31, 2021	121,382,547	$ 12	$ 694,844	$ (162)	$ (238,166)	$ 456,528
Exercise of stock options	357,244	—	460	—	—	460
Vesting of early exercised stock options	—	—	479	—	—	479
Repurchases of restricted stock	(6,945)	—	—	—	—	—
Stock-based compensation expense	—	—	4,442	—	—	4,442
Net loss	—	—	—	—	(36,458)	(36,458)
Unrealized loss on marketable securities, net	—	—	—	(789)	—	(789)
Balance at March 31, 2022	121,732,846	$ 12	$ 700,225	$ (951)	$ (274,624)	$ 424,662
Exercise of stock options	179,985	—	375	—	—	375
Issuance of common stock under the Employee Stock Purchase Plan	150,642	—	617	—	—	617
Vesting of early exercised stock options	—	—	238	—	—	238
Stock-based compensation expense	—	—	5,055	—	—	5,055
Net loss	—	—	—	—	(35,608)	(35,608)
Unrealized loss on marketable securities, net	—	—	—	(272)	—	(272)
Balance at June 30, 2022	122,063,473	$ 12	$ 706,510	$ (1,223)	$ (310,232)	$ 395,067
Exercise of stock options	243,496	—	427	—	—	427
Vesting of early exercised stock options	—	—	238	—	—	238
Stock-based compensation expense	—	—	5,232	—	—	5,232
Net loss	—	—	—	—	(35,489)	(35,489)
Unrealized loss on marketable securities, net	—	—	—	(156)	—	(156)
Balance at September 30, 2022	122,306,969	$ 12	$ 712,407	$ (1,379)	$ (345,721)	$ 365,319

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

Erasca, Inc.
Condensed Consolidated Statements of Cash Flows
(In thousands)
(Unaudited)

	Nine Months Ended September 30,	
	2023	**2022**
Cash flows from operating activities:		
Net loss	$ (95,341)	$ (107,555)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	2,790	1,708
Stock-based compensation expense	20,095	14,729
In-process research and development expenses	—	2,000
Accretion on marketable securities, net	(4,756)	(169)
Changes in operating assets and liabilities:		
Prepaid expenses and other current and long-term assets	(38)	(4,512)
Accounts payable	777	1,540
Accrued expenses and other current and long-term liabilities	(3,253)	2,936
Operating lease assets and liabilities, net	3,297	12,431
Net cash used in operating activities	(76,429)	(76,892)
Cash flows from investing activities:		
Purchases of marketable securities	(253,272)	(94,427)
Maturities of marketable securities	179,200	45,900
In-process research and development	(20,000)	(2,000)
Payment made for investment in equity securities	—	(2,000)
Purchases of property and equipment	(1,693)	(13,687)
Net cash used in investing activities	(95,765)	(66,214)
Cash flows from financing activities:		
Proceeds from the exercise of stock options	312	1,262
Proceeds from issuance of common stock under the Employee Stock Purchase Plan	527	617
Net cash provided by financing activities	839	1,879
Net decrease in cash, cash equivalents and restricted cash	(171,355)	(141,227)
Cash, cash equivalents and restricted cash at beginning of the period	284,625	360,895
Cash, cash equivalents and restricted cash at end of the period	$ 113,270	$ 219,668
Supplemental disclosure of noncash investing and financing activities:		
Amounts accrued for purchases of property and equipment	$ 54	$ 841
Vesting of early exercised options	$ 1,063	$ 955
Operating lease assets obtained in exchange for lease obligations	$ —	$ 22,704
Reduction in operating lease assets due to lease amendment	$ —	$ 3,361

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

Note 1. Organization and basis of presentation

Organization and nature of operations

Erasca, Inc. (Erasca or the Company) is a clinical-stage precision oncology company singularly focused on discovering, developing, and commercializing therapies for RAS/MAPK pathway-driven cancers. The Company has assembled a wholly-owned or controlled RAS/MAPK pathway-focused pipeline consisting of modality-agnostic programs aligned with its three therapeutic strategies of: (1) targeting key upstream and downstream signaling nodes in the RAS/MAPK pathway; (2) targeting RAS directly; and (3) targeting escape routes that emerge in response to treatment. The Company was incorporated under the laws of the State of Delaware on July 2, 2018, as Erasca, Inc., and is headquartered in San Diego, California. In September 2020, the Company established a wholly-owned Australian subsidiary, Erasca Australia Pty Ltd (Erasca Australia), in order to conduct clinical activities in Australia for its development candidates. In November 2020, the Company entered into an agreement and plan of merger with Asana BioSciences, LLC (Asana) and ASN Product Development, Inc. (ASN) (the Asana Merger Agreement), pursuant to which ASN became the Company's wholly-owned subsidiary. In March 2021, the Company established a wholly-owned subsidiary, Erasca Ventures, LLC (Erasca Ventures), to make equity investments in early-stage biotechnology companies that are aligned with the Company’s mission and strategy.

Since inception, the Company has devoted substantially all of its efforts and resources to organizing and staffing the Company, business planning, raising capital, identifying, acquiring and in-licensing the Company’s product candidates, establishing its intellectual property portfolio, conducting research, preclinical studies, and clinical trials, establishing arrangements with third parties for the manufacture of its product candidates and related raw materials, and providing general and administrative support for these operations. As of September 30, 2023, the Company had $296.7 million in cash, cash equivalents, and short-term marketable securities, and $46.9 million in long-term marketable securities. As of September 30, 2023, the Company had an accumulated deficit of $576.3 million. The Company has incurred significant operating losses and negative cash flows from operations. From its inception through September 30, 2023, the Company's financial support has primarily been provided from the sale of its convertible preferred stock and the sale of its common stock in its initial public offering (IPO) and underwritten offering (2022 Offering).

The Company expects to use its cash, cash equivalents, and short-term marketable securities to fund research and development, working capital, and other general corporate purposes. The Company does not expect to generate any revenues from product sales unless and until the Company successfully completes development and obtains regulatory approval for any of its product candidates, which will not be for at least the next several years, if ever. Accordingly, until such time as the Company can generate significant revenue from sales of its product candidates, if ever, the Company expects to finance its cash needs through equity offerings, debt financings, or other capital sources, including potential collaborations, licenses or other similar arrangements. However, the Company may not be able to secure additional financing or enter into such other arrangements in a timely manner or on favorable terms, if at all. The Company’s failure to raise capital or enter into such other arrangements when needed would have a negative impact on the Company’s financial condition and could force the Company to delay, limit, reduce or terminate its research and development programs or other operations, or grant rights to develop and market product candidates that the Company would otherwise prefer to develop and market itself. The Company believes its cash, cash equivalents, and short-term marketable securities as of September 30, 2023 will be sufficient for the Company to fund operations for at least one year from the issuance date of these condensed consolidated financial statements.

Underwritten offering

In December 2022, the Company completed the 2022 Offering pursuant to which the Company issued and sold 15,384,616 shares of its common stock at a price to the public of $6.50 per share. Proceeds from the offering were $94.9 million, net of underwriting discounts and commissions and offering costs of $5.1 million.

Basis of presentation

The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with US generally accepted accounting principles (US GAAP) for interim financial information and pursuant to Form 10-Q and Article 10 of Regulation S-X of the Securities and Exchange Commission (SEC). Accordingly, they do not include all of the information and notes required by US GAAP for complete financial statements. Any reference in these notes to applicable guidance is meant to refer to US GAAP as found in the Accounting Standards Codification (ASC) and Accounting Standards Updates (ASU) promulgated by the Financial Accounting Standards Board (FASB). The Company's condensed consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries, Erasca Australia, ASN, and Erasca Ventures. All intercompany balances and transactions have been eliminated.

Note 2. Summary of significant accounting policies

Use of estimates

The preparation of the Company's condensed consolidated financial statements in conformity with US GAAP requires the Company to make estimates and assumptions that impact the reported amounts of assets, liabilities, expenses, and the disclosure of contingent assets and liabilities in the condensed consolidated financial statements and accompanying notes. Accounting estimates and management judgments reflected in the condensed consolidated financial statements include, but are not limited to, the accrual of research and development expenses, fair value of common stock, stock-based compensation expense, and the incremental borrowing rate for determining the operating lease asset and liability. Management evaluates its estimates on an ongoing basis. Although estimates are based on the Company's historical experience, knowledge of current events, and actions it may undertake in the future, actual results may ultimately materially differ from these estimates and assumptions.

Unaudited interim financial information

The accompanying condensed consolidated balance sheet as of September 30, 2023, the condensed consolidated statements of operations and comprehensive loss for the three and nine months ended September 30, 2023 and 2022, the condensed consolidated statements of stockholders' equity for the three and nine months ended September 30, 2023 and 2022 and the condensed consolidated statements of cash flows for the nine months ended September 30, 2023 and 2022 are unaudited. The unaudited condensed consolidated interim financial statements have been prepared on the same basis as the audited annual consolidated financial statements and, in the opinion of management, reflect all adjustments, which include only normal recurring adjustments, necessary for the fair statement of the Company's condensed consolidated financial position as of September 30, 2023 and the condensed consolidated results of its operations and cash flows for the three and nine months ended September 30, 2023 and 2022. The condensed consolidated financial data and other information disclosed in these notes related to the three and nine months ended September 30, 2023 and 2022 are unaudited. The condensed consolidated results for the three and nine months ended September 30, 2023 are not necessarily indicative of results to be expected for the year ending December 31, 2023, any other interim periods, or any future year or period. These unaudited condensed consolidated financial statements should be read in conjunction with the Company's audited consolidated financial statements included in its Annual Report on Form 10-K for the year ended December 31, 2022 filed with the SEC on March 23, 2023.

Concentration of credit risk and off-balance sheet risk

Financial instruments which potentially subject the Company to significant concentration of credit risk consist of cash and cash equivalents and marketable securities. The Company maintains deposits in federally insured financial institutions in excess of federally insured limits. The Company has not experienced any losses in such accounts, and management believes that the Company is not exposed to significant credit risk due to the financial position of the depository institutions in which those deposits are held. The Company's investment policy includes guidelines for the quality of the related institutions and financial instruments and defines allowable investments that the Company may invest in, which the Company believes minimizes the exposure to concentration of credit risk.

Cash, cash equivalents and restricted cash

Cash and cash equivalents include cash in readily available checking and savings accounts and money market funds. The Company considers all highly liquid investments with an original maturity of three months or less from the date of purchase to be cash equivalents.

The Company had deposited cash of $408,000 as of September 30, 2023 and December 31, 2022 to secure a letter of credit in connection with the lease of the Company's facilities (see Note 10). The Company has classified the restricted cash as a noncurrent asset on its condensed consolidated balance sheets.

The following table provides a reconciliation of cash, cash equivalents and restricted cash reported within the condensed consolidated balance sheets that sum to the total of the same amounts shown in the condensed consolidated statements of cash flows (in thousands):

	September 30,	
	2023	2022
Cash and cash equivalents	$ 112,862	$ 219,260
Restricted cash	408	408
Total cash, cash equivalents and restricted cash	$ 113,270	$ 219,668

Marketable securities and investments

The Company classifies all marketable securities as available-for-sale, as the sale of such securities may be required prior to maturity. Management determines the appropriate classification of its marketable securities at the time of purchase. Marketable securities with original maturities beyond three months at the date of purchase and which mature at, or less than 12 months from, the balance sheet date are classified as short-term marketable securities. Available-for-sale securities are carried at fair value, with the unrealized gains and losses reported as accumulated other comprehensive income (loss) until realized. The amortized cost of available-for-sale debt securities is adjusted for amortization of premiums and accretion of discounts to maturity. Such amortization and accretion are included in interest income. The Company regularly reviews all of its marketable securities for declines in fair value. The review includes the consideration of the cause of the impairment, including the creditworthiness of the security issuers, the number of securities in an unrealized loss position, the severity of the unrealized loss(es), whether the Company has the intent to sell the securities and whether it is more likely than not that the Company will be required to sell the securities before the recovery of their amortized cost basis. If the decline in fair value is due to credit-related factors, a loss is recognized in net income; whereas, if the decline in fair value is not due to credit-related factors, the loss is recorded in other comprehensive income (loss). Realized gains and losses on available-for-sale securities are included in other income or expense. The cost of securities sold is based on the specific identification method. Interest and dividends on securities classified as available-for-sale are included in interest income.

Through its wholly-owned subsidiary, Erasca Ventures, the Company has also invested in equity securities of a company whose securities are not publicly traded and whose fair value is not readily available (see Notes 3 and 14). This investment is recorded using cost minus impairment, plus or minus changes in its estimated fair value resulting from observable price changes in orderly transactions for the identical or a similar investment of the same issuer. Investments in equity securities without readily determinable fair values are assessed for potential impairment on a quarterly basis based on qualitative factors. This investment is included in other assets in the Company's condensed consolidated balance sheets.

Fair value measurements

Certain assets and liabilities are carried at fair value under US GAAP. Fair value is defined as an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or liability. Financial assets and liabilities carried at fair value are classified and disclosed in one of the following three levels of the fair value hierarchy, of which the first two are considered observable and the last is considered unobservable:

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

Level 2—Quoted prices for similar assets and liabilities in active markets, quoted prices in markets that are not active, or inputs which are observable, either directly or indirectly, for substantially the full term of the asset or liability.

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

Recently issued accounting pronouncements not yet adopted

From time to time, new accounting pronouncements are issued by the FASB or other standard setting bodies that the Company adopts as of the specified effective date. There are no recent accounting pronouncements adopted or pending adoption that the Company expects will have a material impact on its condensed consolidated financial statements and related disclosures.

The Company qualifies as an “emerging growth company” as defined in the Jumpstart Our Business Startups Act of 2012 (JOBS Act) and has elected not to “opt out” of the extended transition related to complying with new or revised accounting standards, which means that when a standard is issued or revised and it has different application dates for public and nonpublic companies, the Company can adopt the new or revised standard at the time nonpublic companies adopt the new or revised standard and can do so until such time that the Company either (i) irrevocably elects to “opt out” of such extended transition period or (ii) no longer qualifies as an emerging growth company.

Note 3. Fair value measurements

The following tables summarize the Company’s financial assets measured at fair value on a recurring basis and their respective input levels based on the fair value hierarchy (in thousands):

		Fair value measurements as of September 30, 2023 using		
	September 30, 2023	Quoted prices in active markets for identical assets (level 1)	Significant other observable inputs (level 2)	Significant unobservable inputs (level 3)
Assets:				
Money market funds[1]	$ 106,643	$ 106,643	$ —	$ —
US treasury securities[2]	96,063	96,063	—	—
US government agency securities[2]	16,874	—	16,874	—
Corporate debt securities[2]	2,732	—	2,732	—
Commercial paper[2]	68,137	—	68,137	—
US treasury securities[3]	37,144	37,144	—	—
US government agency securities[3]	9,747	—	9,747	—
Total fair value of assets	$ 337,340	$ 239,850	$ 97,490	$ —

(1) Included as cash and cash equivalents on the condensed consolidated balance sheets.
(2) Included as short-term marketable securities on the condensed consolidated balance sheets.
(3) Included as long-term marketable securities on the condensed consolidated balance sheets.

	December 31, 2022	Fair value measurements as of December 31, 2022 using: Quoted prices in active markets for identical assets (level 1)	Significant other observable inputs (level 2)	Significant unobservable inputs (level 3)
Assets:				
Money market funds[1]	$ 255,080	$ 255,080	$ —	$ —
US treasury securities[2]	127,476	127,476	—	—
US government agency securities[2]	1,468	—	1,468	—
Corporate debt securities[2]	3,301	—	3,301	—
Commercial paper[2]	18,519	—	18,519	—
Supranational debt securities[2]	639	—	639	—
Total fair value of assets	$ 406,483	$ 382,556	$ 23,927	$ —

(1) Included as cash and cash equivalents on the condensed consolidated balance sheets.
(2) Included as short-term marketable securities on the condensed consolidated balance sheets.

The carrying amounts of the Company's financial instruments, including cash, prepaid expenses and other current assets, accounts payable, and accrued expenses and other current liabilities, approximate fair value due to their short maturities. As of September 30, 2023 and December 31, 2022, the Company held a $2.0 million equity investment in Affini-T Therapeutics, Inc. (Affini-T) at cost. No adjustments have been made to the value of the Company's investment in Affini-T since its initial measurement either due to impairment or based on observable price changes. None of the Company's non-financial assets or liabilities are recorded at fair value on a non-recurring basis. No transfers between levels have occurred during the periods presented.

Cash equivalents consist of money market funds, short-term marketable securities consist of US treasury securities, US government agency securities, corporate debt securities, commercial paper and supranational debt securities, and long-term marketable securities consist of US treasury securities and US government agency securities. The Company obtains pricing information from its investment manager and generally determines the fair value of marketable securities using standard observable inputs, including reported trades, broker/dealer quotes, and bid and/or offers.

Note 4. Marketable securities

The following tables summarize the Company's marketable securities accounted for as available-for-sale securities (in thousands, except years):

	September 30, 2023				
	Maturity (in years)	Amortized cost	Unrealized gains	Unrealized losses	Estimated fair value
US treasury securities	1 or less	$ 96,312	$ 1	$ (250)	$ 96,063
US government agency securities	1 or less	16,908	—	(34)	16,874
Corporate debt securities	1 or less	2,736	—	(4)	2,732
Commercial paper	1 or less	68,190	4	(57)	68,137
US treasury securities	1-2	37,352	—	(208)	37,144
US government agency securities	1-2	9,774	2	(29)	9,747
Total		$ 231,272	$ 7	$ (582)	$ 230,697

	December 31, 2022				
	Maturity (in years)	Amortized cost	Unrealized gains	Unrealized losses	Estimated fair value
US treasury securities	1 or less	$ 128,504	$ 5	$ (1,033)	$ 127,476
US government agency securities	1 or less	1,467	1	—	1,468
Corporate debt securities	1 or less	3,309	—	(8)	3,301
Commercial paper	1 or less	18,519	—	—	18,519
Supranational debt securities	1 or less	645	—	(6)	639
Total		$ 152,444	$ 6	$ (1,047)	$ 151,403

The following tables present fair values and gross unrealized losses for those available-for-sale securities that were in an unrealized loss position as of September 30, 2023 and December 31, 2022, aggregated by category and the length of time that the securities have been in a continuous loss position (in thousands):

	September 30, 2023					
	Unrealized losses less than 12 months		Unrealized losses 12 months or greater		Total	
	Fair value	Unrealized losses	Fair value	Unrealized losses	Fair value	Unrealized losses
US treasury securities	$ 115,768	$ (420)	$ 9,960	$ (38)	$ 125,728	$ (458)
US government agency securities	21,619	(63)	—	—	21,619	(63)
Corporate debt securities	2,238	(4)	—	—	2,238	(4)
Commercial paper	49,976	(57)	—	—	49,976	(57)
Total	$ 189,601	$ (544)	$ 9,960	$ (38)	$ 199,561	$ (582)

	December 31, 2022					
	Unrealized losses less than 12 months		Unrealized losses 12 months or greater		Total	
	Fair value	Unrealized losses	Fair value	Unrealized losses	Fair value	Unrealized losses
US treasury securities	$ 60,652	$ (129)	$ 44,048	$ (904)	$ 104,700	$ (1,033)
Corporate debt securities	2,560	(8)	—	—	2,560	(8)
Supranational debt securities	639	(6)	—	—	639	(6)
Total	$ 63,851	$ (143)	$ 44,048	$ (904)	$ 107,899	$ (1,047)

As of September 30, 2023, there were 50 available-for-sale securities with an estimated fair value of $199.6 million in gross unrealized loss positions, of which 2 available-for-sale securities with an estimated fair value of $10.0 million were in an unrealized loss position for more than 12 months. As of December 31, 2022, there were 35 available-for-sale securities with an estimated fair value of $107.9 million in gross unrealized loss positions, of which 10 available-for-sale securities with an estimated fair value of $44.0 million were in an unrealized loss position for more than 12 months.

As of September 30, 2023 and December 31, 2022, unrealized losses on available-for-sale securities are not attributed to credit risk. The Company believes that an allowance for credit losses is unnecessary because the unrealized losses on certain of the Company's available-for-sale securities are due to market factors and interest rate increases. Additionally, the Company does not intend to sell the securities nor is it more likely than not that the Company will be required to sell the securities before recovery of their amortized cost basis.

Accrued interest on the Company's available-for-sale securities was $926,000 and $748,000 as of September 30, 2023 and December 31, 2022, respectively, and was included in prepaid expenses and other current assets on the condensed consolidated balance sheets.

Note 5. Property and equipment, net

Property and equipment, net consisted of the following (in thousands):

	September 30, 2023	December 31, 2022
Laboratory equipment	$ 5,587	$ 4,815
Furniture and fixtures	4,099	4,104
Leasehold improvements	18,173	17,837
Computer equipment and software	1,660	1,559
Property and equipment	29,519	28,315
Less accumulated depreciation and amortization	(6,290)	(3,500)
Property and equipment, net	$ 23,229	$ 24,815

Depreciation and amortization expense related to property and equipment was $941,000 and $2.8 million for the three and nine months ended September 30, 2023, respectively, and $771,000 and $1.7 million for the three and nine months ended September 30, 2022, respectively.

Note 6. Accrued expenses and other current liabilities

Accrued expenses and other current liabilities consisted of the following (in thousands):

	September 30, 2023	December 31, 2022
Accrued research and development expenses	$ 9,557	$ 11,523
Accrued compensation	8,501	9,395
Unvested early exercised stock option liability	632	1,690
Accrued professional services	353	873
Accrued property and equipment	17	638
Other accruals	151	217
Total	$ 19,211	$ 24,336

Note 7. Asset acquisitions

The following purchased assets were accounted for as asset acquisitions as substantially all of the fair value of the assets acquired were concentrated in a group of similar assets, and the acquired assets did not have outputs or employees. Because the assets had not yet received regulatory approval, the fair value attributable to these assets was recorded as in-process research and development expenses in the Company's condensed consolidated statements of operations and comprehensive loss.

Asana BioSciences, LLC

In November 2020, the Company entered into the Asana Merger Agreement, pursuant to which ASN became its wholly-owned subsidiary. Asana and ASN had previously entered into a license agreement, which was amended and restated prior to the closing of the merger transaction (the Asana License Agreement, and collectively with the Asana Merger Agreement, the Asana Agreements), pursuant to which ASN acquired an exclusive, worldwide license to certain intellectual property rights relating to inhibitors of ERK1 and ERK2 owned or controlled by Asana to develop and commercialize ERAS-007 and certain other related compounds for all applications.

Under the Asana Merger Agreement, in 2020, the Company made an upfront payment of $20.0 million and issued 4,000,000 shares of its Series B-2 convertible preferred stock to Asana at a value of $7.50 per share or a total fair value of equity of $30.0 million. In connection with the Company's IPO, these shares of Series B-2 convertible preferred stock were converted into 3,333,333 shares of the Company's common stock. The Company is obligated to make future development and regulatory milestone cash payments for a licensed product in an amount of up to $90.0 million. Additionally, upon achieving a development milestone related to demonstration of successful proof-of-concept in a specified clinical trial, the Company will also be required to issue 3,888,889 shares of its common stock to Asana. The Company is not obligated to pay royalties on the net sales of licensed products. No IPR&D expense was recorded during the three and nine months ended September 30, 2023 and 2022. As of September 30, 2023 and December 31, 2022, no milestones had been accrued as the underlying contingencies were not probable or estimable.

Emerge Life Sciences, Pte. Ltd.

In March 2021, the Company entered into an asset purchase agreement (ELS Purchase Agreement) with Emerge Life Sciences, Pte. Ltd. (ELS) wherein it purchased all rights, title, and interest (including all patent and other intellectual property rights) to EGFR antibodies directed against the EGFR domain II (EGFR-D2) and domain III (EGFR-D3) as well as a bispecific antibody where one arm is directed against EGFR-D2 and the other is directed against EGFR-D3 (the Antibodies). Under the terms of the ELS Purchase Agreement, in 2021, the Company made an upfront payment of $2.0 million and issued to ELS 500,000 shares of the Company's common stock at a value of $3.36 per share or a total fair value of equity of $1.7 million. No IPR&D expense was recorded during the three and nine months ended September 30, 2023 and 2022.

Note 8. License agreements

Novartis Pharma AG

In December 2022, the Company entered into an exclusive license agreement (as amended, the Novartis Agreement) with Novartis Pharma AG (Novartis) under which the Company was granted an exclusive, worldwide, royalty-bearing license to certain patent and other intellectual property rights owned or controlled by Novartis to develop, manufacture, use, and commercialize naporafenib in all fields of use. The Company has the right to sublicense (through multiple tiers) its rights under the Novartis Agreement, subject to certain limitations and conditions, and is required to use commercially reasonable efforts to commercialize licensed products in certain geographical markets.

The license granted under the Novartis Agreement is subject to Novartis' reserved right to: (i) develop, manufacture, use, and commercialize compounds unrelated to naporafenib under the licensed patent rights and know-how, (ii) use the licensed patent rights and know-how for non-clinical research purposes, and (iii) use the licensed patent rights and know-how to the extent necessary to perform ongoing clinical trials and perform its obligations under existing contracts and under the Novartis Agreement.

Under the Novartis Agreement, the Company made an upfront cash payment to Novartis of $20.0 million and issued to Novartis 12,307,692 shares of common stock of the Company having an aggregate value of approximately $80.0 million. The Company is obligated to make future regulatory milestone payments of up to $80.0 million and sales milestone payments of up to $200.0 million. The Company is also obligated to pay royalties on net sales of all licensed products, in the low-single digit percentages, subject to certain reductions. The Company recorded $100.0 million in IPR&D expense during the year ended December 31, 2022 in connection with the Novartis Agreement. As of September 30, 2023 and December 31, 2022, the Company had recorded $0 and $20.0 million in accounts payable on the condensed consolidated balance sheets related to the upfront cash payment, respectively. As of September 30, 2023 and December 31, 2022, no milestones are accrued as the underlying contingencies are not probable or estimable.

The Novartis Agreement will expire upon the last to expire royalty term, which is determined on a licensed product-by-licensed product and country-by-country basis, and is the later of: (i) ten years from the date of first commercial sale for the licensed product in such country, (ii) the last to expire valid claim within the licensed patent rights covering such licensed product, or (iii) the expiration of all regulatory exclusivity for the licensed product in such country. Upon expiration of the Novartis Agreement, on a licensed product-by-licensed product and country-by-country basis, the Company will have a fully paid-up, perpetual, and irrevocable license to develop, manufacture, use, and commercialize the licensed products.

The Novartis Agreement may be terminated in its entirety by either party in the event of an uncured material breach by the other party. Novartis may terminate the Novartis Agreement upon written notice in the event the Company becomes subject to specified bankruptcy, insolvency, or similar circumstances. The Company may terminate the Novartis Agreement in its entirety at any time upon the provision of prior written notice to Novartis. Upon termination of the Novartis Agreement for any reason, all rights and licenses granted to the Company will terminate. In addition, upon termination of the Novartis Agreement for any reason other than its natural expiration, Novartis has an option to negotiate a license under any patent rights, know-how, or other intellectual property rights relating to the licensed products that are owned or controlled by the Company for the purpose of developing, manufacturing and commercializing the licensed products on terms to be negotiated between the parties.

NiKang Therapeutics, Inc.

In February 2020, the Company entered into a license agreement (the NiKang Agreement) with NiKang Therapeutics, Inc. (NiKang) under which the Company was granted an exclusive, worldwide license to certain intellectual property rights owned or controlled by NiKang related to certain SHP2 inhibitors to develop and commercialize ERAS-601 and certain other related compounds for all applications.

Under the NiKang Agreement, in 2020, the Company made an upfront payment of $5.0 million to NiKang and reimbursed NiKang $0.4 million for certain initial manufacturing costs. In addition, the Company paid $7.0 million in 2020 related to the publication of a US patent application that covered the composition of matter of ERAS-601. The Company is also obligated to pay (i) development and regulatory milestone payments in an aggregate amount of up to $16.0 million for the first licensed product, of which $4.0 million was paid in January 2021, and $12.0 million for a second licensed product, and (ii) commercial milestone payments in an aggregate amount of up to $157.0 million for the first licensed product and $151.0 million for a second licensed product. The Company is also obligated to: (i) pay tiered royalties on net sales of all licensed products in the mid-single digit percentages, subject to certain reductions; and (ii) equally split all net sublicensing revenues earned under sublicense agreements that the Company enters into with any third party before commencement of the first Phase I clinical trial for a licensed product. No IPR&D expense was recorded during the three and nine months ended September 30, 2023 and 2022. As of September 30, 2023 and December 31, 2022, no milestones are accrued as the underlying contingencies are not probable or estimable.

Katmai Pharmaceuticals, Inc.

In March 2020, the Company entered into a license agreement (the Katmai Agreement) with Katmai Pharmaceuticals, Inc. (Katmai) under which the Company was granted an exclusive, worldwide, royalty-bearing license to certain patent rights and know-how controlled by Katmai related to the development of small molecule therapeutic and diagnostic products that modulate EGFR and enable the identification, diagnosis, selection, treatment, and/or monitoring of patients for neuro-oncological applications to develop, manufacture, use, and commercialize ERAS-801 and certain other related compounds in all fields of use.

Under the Katmai Agreement, the Company made an upfront payment of $5.7 million and Katmai agreed to purchase shares of the Company’s Series B-1 convertible preferred stock and Series B-2 convertible preferred stock having an aggregate value of $2.7 million. In April 2020, Katmai purchased 356,000 shares of the Company’s Series B-1 convertible preferred stock for $1.8 million, and in January 2021, Katmai purchased 118,666 shares of the Company’s Series B-2 convertible preferred stock for $0.9 million. In connection with the Company's IPO, these shares of Series B-1 convertible preferred stock and Series B-2 convertible preferred stock were converted into 395,555 shares of the Company's common stock, in the aggregate. The Company is obligated to make future development and regulatory milestone payments of up to $26.0 million, of which $2.0 million was paid in March 2022, and commercial milestone payments of up to $101.0 million. The Company is also obligated to pay tiered royalties on net sales of each licensed product, at rates ranging from the mid- to high-single digit percentages, subject to a minimum annual royalty payment in the low six figures and certain permitted deductions. No IPR&D expense was recorded during the three and nine months ended September 30, 2023. The Company recorded IPR&D expense of $0 and $2.0 million in connection with a development milestone payment made during the three and nine months ended September 30, 2022, respectively. As of September 30, 2023 and December 31, 2022, no milestones are accrued as the underlying contingencies are not probable or estimable.

LifeArc

In April 2020, the Company entered into a license agreement with LifeArc (the LifeArc Agreement) under which the Company was granted an exclusive, worldwide license to certain materials, know-how, and intellectual property rights owned or controlled by LifeArc to develop, manufacture, use, and commercialize certain ULK inhibitors for all applications.

Under the LifeArc Agreement, the Company was granted the license at no upfront cost and a period of three months after the effective date to conduct experiments on LifeArc's compounds. Upon completion of this initial testing period, the Company had the option to continue the license and make a one-time license payment of $75,000 to LifeArc, which payment was subsequently made in 2020. The Company is obligated to make future development milestone payments for a licensed product of up to $11.0 million and sales milestone payments of up to $50.0 million. The Company is also obligated to pay royalties on net sales of all licensed products, in the low-single digit percentages, subject to certain reductions. No IPR&D expense was recorded during the three and nine months ended September 30, 2023 and 2022. As of September 30, 2023 and December 31, 2022, no milestones are accrued as the underlying contingencies are not probable or estimable.

University of California, San Francisco

In December 2018, the Company entered into a license agreement, as amended (the UCSF Agreement), with The Regents of the University of California, San Francisco (the Regents), under which the Company was granted an exclusive, worldwide, royalty-bearing license under certain patent rights claiming novel covalent inhibitors of GTP- and GDP-bound RAS for the development and commercialization of products covered by such patent rights for the prevention, treatment and amelioration of human cancers and other diseases and conditions. The UCSF Agreement was amended in May 2021.

Under the UCSF Agreement, the Company made upfront payments of $50,000 to the Regents and paid the Regents an annual license maintenance fee during the term of the license, but such fee would not have been due on any anniversary if, on that date, the Company was then making royalty payments to the Regents. The Company was obligated to make future development and regulatory milestone payments of up to $6.4 million and a sales milestone payment of $2.0 million for either of the first two licensed products. The Company was also obligated to pay royalties on net sales of all licensed products in the low-single digit percentages, subject to a minimum annual royalty payment in the low six figures, commencing on the year of the first sale of a licensed product and continuing, on a licensed product-by-licensed product and country-by-country basis, until there were no valid claims of the licensed patent rights covering the licensed product in such country.

Additionally, the Company was obligated to pay tiered sublicensing fees, with the first two tiers in the low-to-mid teen percentages and the third tier at 30%, on certain fees the Company received from any sublicense that the Company granted, depending on the stage of development of a licensed product when such sublicense was granted. Prior to the execution of the amendment, the Company was obligated to make a cash payment to the Regents in the event of the Company's initial public offering, a change of control transaction or a reverse merger (the Corporate Milestone). In the amendment, the amount of the cash payment payable upon the Company's achievement of a Corporate Milestone was reduced and the Company agreed to issue the Regents 944,945 shares of the Company's common stock, which issuance was not contingent upon the achievement of a Corporate Milestone and occurred in May 2021. In August 2021, following the achievement of the Corporate Milestone, the Company made a cash payment to the Regents in the amount of $1.7 million. No IPR&D expense was recorded during the three and nine months ended September 30, 2023 and 2022. As of September 30, 2023 and December 31, 2022, no milestones are accrued as the underlying contingencies are not probable or estimable.

On August 7, 2023, the Company sent a notice of termination to the Regents with respect to the UCSF Agreement. The termination of the UCSF Agreement, including termination of the exclusive license granted to the Company under the UCSF Agreement, was effective as of October 6, 2023.

Note 9. Stock-based compensation

In July 2021, the Company's board of directors adopted and the Company's stockholders approved the Company's 2021 Incentive Award Plan (the 2021 Plan), which became effective in connection with the IPO. Upon the adoption of the 2021 Plan, the Company ceased making equity grants under its 2018 Equity Incentive Plan (the 2018 Plan). Under the 2021 Plan, the Company may grant stock options, restricted stock, restricted stock units, stock appreciation rights, and other stock or cash-based awards to individuals who are then employees, officers, directors or non-entity consultants of the Company. A total of 15,150,000 shares of common stock were initially reserved for issuance under the 2021 Plan. In addition, the number of shares of common stock available for issuance under the 2021 Plan may be increased annually on the first day of each calendar year during the term of the 2021 Plan, beginning in 2022, by an amount equal to the lesser of (i) 5% of the shares of common stock outstanding on the final day of the immediately preceding calendar year or (ii) such smaller number of shares as determined by the Company's board of directors or an authorized committee of the board of directors. As of September 30, 2023, there were 15,174,985 stock-based awards available for future grant under the 2021 Plan.

Subsequent to July 2021, no further awards will be granted under the 2018 Plan and all future stock-based awards will be granted under the 2021 Plan. To the extent outstanding options or restricted stock granted under the 2018 Plan are cancelled, forfeited, repurchased, or otherwise terminated without being exercised or becoming vested, and would otherwise have been returned to the share reserve under the 2018 Plan, the number of shares underlying such awards will be available for future grant under the 2021 Plan.

Options granted are exercisable at various dates as determined upon grant and will expire no more than ten years from their date of grant. Stock options generally vest over a four-year term. The exercise price of each option shall be determined by the Company's board of directors based on the estimated fair value of the Company's stock on the date of the option grant. The exercise price shall not be less than 100% of the fair market value of the Company's common stock at the time the option is granted. For holders of more than 10% of the Company's total combined voting power of all classes of stock, incentive stock options may not be granted at less than 110% of the fair market value of the Company's common stock on the date of grant and for a term that exceeds five years. Early exercise is permitted for certain grants under the 2018 Plan.

Stock options

A summary of the Company's stock option activity under the 2021 Plan and 2018 Plan is as follows (in thousands, except share and per share data and years):

	Shares	Weighted-average exercise price	Weighted-average remaining contractual term (years)	Aggregate intrinsic value
Outstanding at December 31, 2022	17,393,396	$ 5.84	8.20	$ 18,295
Granted	11,611,837	3.72		
Exercised	(381,059)	0.82		
Canceled	(3,241,657)	5.27		
Outstanding at September 30, 2023	25,382,517	$ 5.02	8.15	$ 4,050
Options exercisable at September 30, 2023	10,544,770	$ 4.73	7.14	$ 3,583

The weighted-average grant date fair value of options granted for the three and nine months ended September 30, 2023 was $1.99 and $2.74, respectively, and for the three and nine months ended September 30, 2022 was $4.91 and $7.50, respectively. As of September 30, 2023, the unrecognized compensation cost related to unvested stock option grants was $56.4 million and is expected to be recognized as expense over approximately 2.59 years. The intrinsic value of the options exercised for the three and nine months ended September 30, 2023 was $21,000 and $914,000, respectively. The intrinsic value of the options exercised for the three and nine months ended September 30, 2022 was $1.5 million and $5.9 million, respectively.

Prior to the Company's IPO, certain individuals were granted the ability to early exercise their stock options. The shares of common stock issued from the early exercise of unvested stock options are restricted and continue to vest in accordance with the original vesting schedule. The Company has the option to repurchase any unvested shares at the original purchase price upon any voluntary or involuntary termination. The shares purchased by the employees and non-employees pursuant to the early exercise of stock options are not deemed, for accounting purposes, to be outstanding until those shares vest. The cash received in exchange for exercised and unvested shares related to stock options granted is recorded as a liability for the early exercise of stock options on the accompanying condensed consolidated balance sheets and will be transferred into common stock and additional paid-in capital as the shares vest. As of September 30, 2023 and December 31, 2022, there were 515,366 shares and 1,115,105 shares subject to repurchase by the Company, respectively. As of September 30, 2023 and December 31, 2022, the Company recorded $632,000 and $1.7 million of liabilities associated with shares issued with repurchase rights, respectively, which is recorded in accrued expenses and other current liabilities.

The assumptions used in the Black-Scholes option pricing model to determine the fair value of the employee and nonemployee stock option grants were as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Risk-free interest rate	4.11%-4.39%	2.65%-3.38%	3.46%-4.39%	1.46%-3.38%
Expected volatility	83.73%-84.41%	85.76%-86.34%	83.20%-85.81%	85.51%-87.11%
Expected term (in years)	6.03-6.08	6.03-6.08	5.50-6.08	5.50-6.08
Expected dividend yield	--%	--%	--%	--%

Employee stock purchase plan

In July 2021, the Company’s board of directors adopted and the Company’s stockholders approved the Company's 2021 Employee Stock Purchase Plan (the ESPP), which became effective in connection with the IPO. The ESPP permits participants to contribute up to a specified percentage of their eligible compensation during a series of offering periods of 24 months, each comprised of four six-month purchase periods, to purchase the Company’s common stock. The purchase price of the shares will be 85% of the fair market value of the Company’s common stock on the first day of trading of the applicable offering period or on the applicable purchase date, whichever is lower. A total of 1,260,000 shares of common stock was initially reserved for issuance under the ESPP. In addition, the number of shares of common stock available for issuance under the ESPP may be increased annually on the first day of each calendar year during the term of the ESPP, beginning in 2022, by an amount equal to the lesser of (i) 1% of the shares of common stock outstanding on the final day of the immediately preceding calendar year or (ii) such smaller number of shares as determined by the Company’s board of directors or an authorized committee of the board of directors. The Company recognized stock-based compensation expense related to the ESPP of $198,000 and $1.3 million during the three and nine months ended September 30, 2023, respectively, and $166,000 and $834,000 during the three and nine months ended September 30, 2022, respectively. As of September 30, 2023, the unrecognized compensation cost related to the ESPP was $1.4 million and is expected to be recognized as expense over approximately 1.67 years. As of September 30, 2023 and December 31, 2022, $317,000 and $74,000 has been withheld on behalf of employees for future purchase under the ESPP, respectively, and is included in accrued expenses and other current liabilities on the condensed consolidated balance sheets. The Company issued and sold zero and 223,696 shares under the ESPP during the three and nine months ended September 30, 2023, respectively, and zero and 150,642 shares during the three and nine months ended September 30, 2022, respectively.

The assumptions used in the Black-Scholes option pricing model to determine the fair value of the stock to be purchased under the ESPP were as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023[(1)]	2022[(1)]	2023	2022
Risk-free interest rate	--%	--%	4.70%-5.35%	2.24%-3.14%
Expected volatility	--%	--%	72.54%-82.79%	84.74%-87.89%
Expected term (in years)	--	--	0.50-1.99	0.50-1.99
Expected dividend yield	--%	--%	--%	--%

(1) No grants were made under the ESPP during the three months ended September 30, 2023 and 2022.

Stock-based compensation expense

The allocation of stock-based compensation for all stock awards was as follows (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Research and development	$ 3,162	$ 2,872	$ 10,909	$ 8,607
General and administrative	3,076	2,360	9,186	6,122
Total	$ 6,238	$ 5,232	$ 20,095	$ 14,729

Common stock reserved for future issuance

Common stock reserved for future issuance consisted of the following as of September 30, 2023 and December 31, 2022:

	September 30, 2023	December 31, 2022
Stock options issued and outstanding	25,382,517	17,393,396
Awards available for future grant	15,174,985	16,022,747
Shares available for purchase under the ESPP	2,245,918	965,131
Total	42,803,420	34,381,274

Note 10. Leases

Operating leases

The Company has facility leases for office space under non-cancellable and cancelable operating leases with various expiration dates through 2032 and equipment under a non-cancellable operating lease with a term expiring in 2026. Total lease costs were approximately $2.8 million and $8.6 million, including operating lease costs of $1.9 million and $5.7 million and variable lease costs of $859,000 and $2.9 million, during the three and nine months ended September 30, 2023, respectively. Total lease costs were approximately $2.6 million and $5.1 million, including operating lease costs of $1.9 million and $3.9 million, variable lease costs of $701,000 and $1.1 million, and short-term lease costs of $24,000 and $86,000, during the three and nine months ended September 30, 2022, respectively. The Company paid $4.7 million and $585,000 in cash for operating leases that were included in the operating activities section of the condensed consolidated statements of cash flows for the nine months ended September 30, 2023 and 2022, respectively.

The weighted-average remaining lease term and the weighted-average discount rate of the Company's operating leases were 8.53 years and 8.95% at September 30, 2023, respectively. The weighted-average remaining lease term and the weighted-average discount rate of the Company's operating leases were 9.26 years and 8.96% at December 31, 2022, respectively. The weighted-average remaining lease term does not include any renewal options at the election of the Company.

The Company's lease agreements do not contain any material residual value guarantees or material restrictive covenants.

Facility leases

In September 2020, the Company entered into a lease agreement for 59,407 square feet of laboratory and office space in San Diego, California, which represented a portion of a new facility that was under construction and which was subsequently amended in March 2021 to expand the rented premises by 18,421 square feet (the 2020 Lease). The construction and design of the asset was the primary responsibility of the lessor. The Company was involved in certain aspects of construction and design for certain interior features and leasehold improvements that is beneficial to the Company to better suit its business needs and intended purpose of the space. The lease is accounted for as an operating lease and commenced in August 2021. In April 2022, the 2020 Lease was modified to amend the rent commencement date from February 2022 to May 2022. The 2020 Lease, as amended, has a term of 10.75 years and includes aggregate monthly payments to the lessor of approximately $51.6 million beginning in May 2023 with a rent escalation clause, and a tenant improvement allowance of approximately $16.8 million. The Company is responsible for its share of operating expenses based on actual operating expenses incurred by the landlord. The 2020 Lease is cancellable at the Company's request after the 84th month with 12 months written notice and a lump-sum cancellation payment of $2.5 million. As discussed in Note 2, the Company provided a letter of credit to the lessor for $408,000, which expires July 29, 2032.

In December 2021, the Company entered into a lease agreement for 29,542 square feet of office and laboratory space in South San Francisco, California. The lease is accounted for as an operating lease with the associated operating lease assets and liabilities recorded upon commencement, which occurred in July 2022. The non-cancellable operating lease has an initial term of 124 months with an option to extend the lease term by 5 years at the then-current market rates and includes aggregate monthly payments to the lessor of approximately $34.4 million beginning in November 2022 with a rent escalation clause and a tenant improvement allowance of approximately $8.2 million. The Company is responsible for its share of operating expenses based on actual operating expenses incurred by the landlord. The construction and design of the tenant improvements was the primary responsibility of the lessor. While the Company was involved in certain aspects of construction and design for certain interior features and leasehold improvements that is beneficial to the Company to better suit its business needs and intended purpose of the space, all construction was handled directly by the landlord. The Company was not deemed to be the accounting owner of the tenant improvements prior to or after the construction period. All payments made by the Company for landlord-owned tenant improvements were recorded as prepaid rent on the condensed consolidated balance sheets prior to lease commencement and included in the operating lease asset upon lease commencement. In February 2022, the expected project costs exceeded the tenant improvement allowances by $5.1 million, which was paid directly to the landlord by the Company and was recorded as prepaid rent in the condensed consolidated balance sheets and as a cash outflow from operating activities in the condensed consolidated statements of cash flows. Upon lease commencement, the $5.1 million of prepaid rent was included in the operating lease asset. The Company paid a security deposit of $874,000 in December 2021 that was recorded as other assets in the condensed consolidated balance sheets.

Future minimum lease payments under the operating leases with initial lease terms in excess of one year as of September 30, 2023 are as follows (in thousands):

Year ending December 31,		
2023 (remaining three months)	$	2,146
2024		8,752
2025		9,024
2026		9,170
2027		9,199
Thereafter		44,375
Total lease payments	$	82,666
Less: Amount representing interest		(25,908)
Operating lease liabilities	$	56,758

Note 11. Commitments and contingencies

Liabilities for loss contingencies arising from claims, assessments, litigation, fines, penalties and other sources are recorded when it is probable that a liability has been incurred and the amount can be reasonably estimated. There are no matters currently outstanding for which any such liabilities have been accrued.

Note 12. Income taxes

No provision for federal, state or foreign income taxes has been recorded for the three and nine months ended September 30, 2023 and 2022. The Company has incurred net operating losses for all the periods presented and has not reflected any benefit of such net operating loss carryforwards in the accompanying condensed consolidated financial statements due to uncertainty around utilizing these tax attributes within their respective carryforward periods. The Company has recorded a full valuation allowance against all of its deferred tax assets as it is not more likely than not that such assets will be realized in the near future. The Company's policy is to recognize interest expense and penalties related to income tax matters as tax expense. For the three and nine months ended September 30, 2023 and 2022, the Company has not recognized any interest or penalties related to income taxes.

Note 13. Net loss per share

The following table summarizes the computation of basic and diluted net loss per share of the Company (in thousands, except share and per share data):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Net loss	$ (30,361)	$ (35,489)	$ (95,341)	$ (107,555)
Weighted-average shares of common stock used in computing net loss per share, basic and diluted	150,450,201	120,798,322	150,000,613	120,166,023
Net loss per share, basic and diluted	$ (0.20)	$ (0.29)	$ (0.64)	$ (0.90)

The Company's potentially dilutive securities, which include options to purchase common stock, shares purchasable under the ESPP and common stock subject to repurchase related to options early exercised, have been excluded from the computation of diluted net loss per share as the effect would be to reduce the net loss per share. Therefore, the weighted-average number of common shares outstanding used to calculate both basic and diluted net loss per share is the same. The Company excluded the following potential common shares, presented as amounts outstanding at each period end, from the computation of diluted net loss per share for the periods indicated because including them would have had an anti-dilutive effect:

	September 30, 2023	September 30, 2022
Options to purchase common stock	25,382,517	17,642,185
Options early exercised subject to future vesting	515,366	1,282,031
Estimated shares purchasable under the ESPP	1,350,546	876,347
Total potentially dilutive shares	27,248,429	19,800,563

Note 14. Related party transactions

Erasca Foundation

In May 2021, the Company established the Erasca Foundation to provide support such as direct research grants, hardship grants, patient advocacy, patient education in underserved populations, and funding for other initiatives to positively impact society that align with the Company's mission. The Company's chief executive officer and certain board members serve as directors of the Erasca Foundation and the Company's chief executive officer, chief financial officer and chief business officer, and general counsel are also officers of the Erasca Foundation. In April 2023, the Company loaned the Erasca Foundation $125,000 in exchange for a non-interest bearing promissory note that matures one year following the date of the note. As of September 30, 2023 and December 31, 2022, $125,000 and $0 is recorded in prepaid expenses and other current assets in the condensed consolidated balance sheets, respectively.

Affini-T Therapeutics, Inc.

The Company holds a $2.0 million equity investment in Affini-T. One of the Company's board members is also a member of the board of Affini-T.

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 notes thereto included elsewhere in this Quarterly Report on Form 10-Q and with our audited consolidated financial statements and notes thereto and management's discussion and analysis of financial condition and results of operations for the year ended December 31, 2022, included in our Annual Report on Form 10-K for the year ended December 31, 2022 filed with the SEC on March 23, 2023.

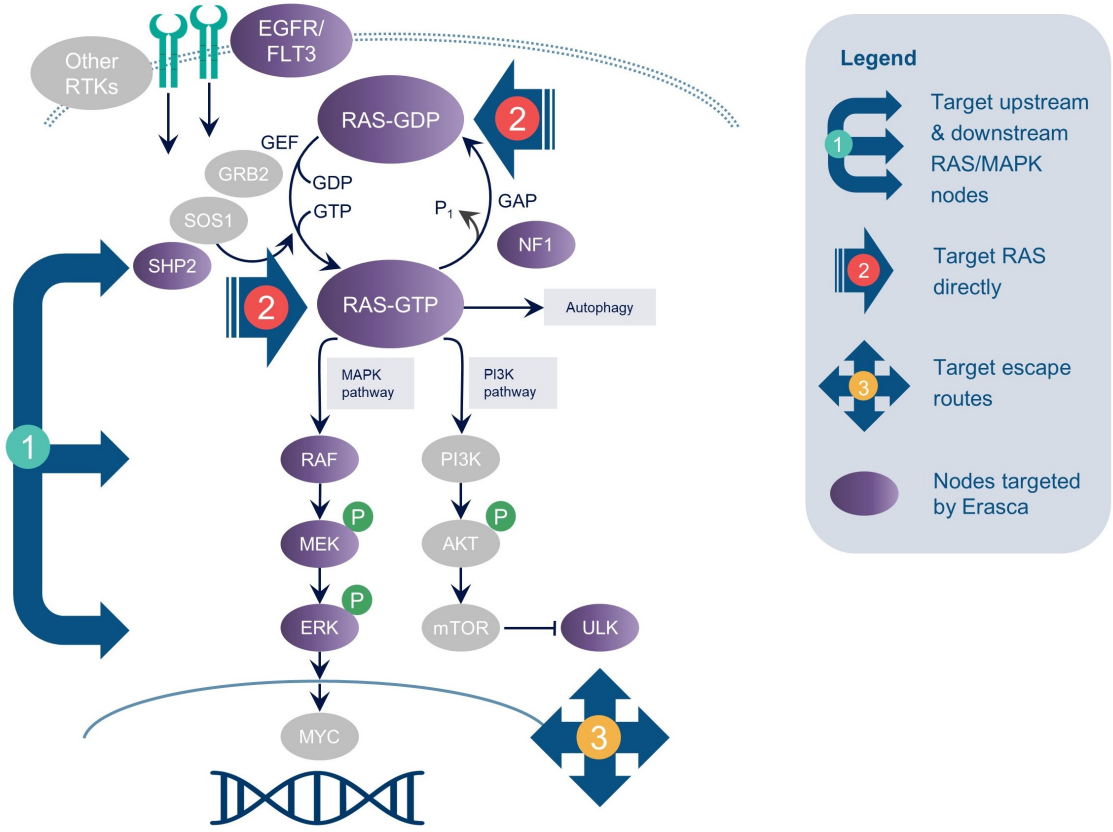
Cautionary Note Regarding Forward-Looking Statements

This Quarterly Report contains forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended (the Exchange Act). All statements other than statements of historical facts contained in this Quarterly Report, including statements regarding our future results of operations and financial position, business strategy, research and development plans, the anticipated timing, costs, design and conduct of our ongoing and planned preclinical studies and planned clinical trials for our product candidates, the timing and likelihood of regulatory filings and approvals for our product candidates, our ability to commercialize our product candidates, if approved, the impact of global geopolitical events and war on our business, the pricing and reimbursement of our product candidates, if approved, the potential to develop future product candidates, the potential benefits of current and future licenses, acquisitions, and strategic arrangements with third parties, and our intent to enter into any future strategic arrangements, the timing and likelihood of success, plans and objectives of management for future operations and future results of anticipated product development efforts, are forward-looking statements. In some cases, you can identify forward-looking statements by terms such as "may," "will," "should," "could," "expect," "intend," "target," "plan," "anticipate," "believe," "estimate," "predict," "potential," "continue," or the negative of these terms or other similar expressions. These forward-looking statements are only predictions. We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our business, financial condition and results of operations. These forward-looking statements speak only as of the date of this Quarterly Report and are subject to a number of risks, uncertainties and assumptions, including those described in Part II, Item 1A, "Risk Factors." The events and circumstances reflected in our forward-looking statements may not be achieved or occur, and actual results could differ materially from those projected in the forward-looking statements. Except as required by applicable law, we do not plan to publicly update or revise any forward-looking statements contained herein, whether as a result of any new information, future events, changed circumstances or otherwise.

Overview

We are a clinical-stage precision oncology company singularly focused on discovering, developing, and commercializing therapies for patients with RAS/MAPK pathway-driven cancers. Molecular alterations in RAS, the most frequently mutated oncogene, and the MAPK pathway, one of the most frequently altered signaling pathways in cancer, account for approximately 5.5 million new patients diagnosed with cancer globally each year. Our company was co-founded by leading pioneers in precision oncology and RAS targeting to create novel therapies and combination regimens designed to comprehensively shut down the RAS/MAPK pathway for the treatment of cancer. We have assembled what we believe to be the deepest, wholly-owned or controlled RAS/MAPK pathway-focused pipeline in the industry, consisting of modality-agnostic programs aligned with our three therapeutic strategies of: (1) targeting key upstream and downstream signaling nodes in the RAS/MAPK pathway; (2) targeting RAS directly; and (3) targeting escape routes that emerge in response to treatment.

The following figure shows the RAS/MAPK pathway and how the three therapeutic strategies listed above attempt to comprehensively and synergistically shut down the RAS/MAPK pathway.



The target breadth and molecular diversity represented in our pipeline enable us to pursue a systematic, data-driven clinical development effort to identify single agent and combination approaches with the goal of prolonging survival in numerous patient populations with high unmet medical needs. Our modality-agnostic approach aims to allow us to selectively and potently inhibit or degrade critical signaling nodes with small molecule therapeutics, large molecule therapeutics, and protein degraders. Our purpose-built pipeline includes four clinical-stage programs (a pan-RAF inhibitor, an ERK inhibitor, a SHP2 inhibitor, and a central nervous system (CNS)-penetrant EGFR inhibitor), and additional discovery-stage programs targeting other key oncogenic drivers. We believe our world-class team's capabilities and experience, further guided by our scientific advisory board, which includes the world's leading experts in the RAS/MAPK pathway, uniquely position us to achieve our bold mission of erasing cancer.

Our lead product candidate is naporafenib, for which we plan to begin a pivotal Phase 3 trial in the first half of 2024 for patients with NRAS-mutated (NRASm) melanoma. We initiated a Phase 1b trial in August 2023 for patients with RAS Q61X solid tumors to inform additional clinical development pathways for naporafenib. Naporafenib is a pan-RAF inhibitor with first-in-class and best-in-class potential to treat patients with NRASm melanoma, RAS Q61X solid tumors, and other RAS/MAPK pathway-driven tumors. RAF proteins are ubiquitously expressed serine-threonine kinases that constitute a key node of the RAS/MAPK pathway downstream of RAS and upstream of MEK. The RAF protein family consists of ARAF, BRAF, and CRAF (RAF1) that are activated through dimerization. Mutations in RAF proteins have been observed in many cancers, such as melanoma, colorectal cancer (CRC), non-small cell lung cancer (NSCLC), and thyroid cancer. We exclusively in-licensed naporafenib from Novartis in December 2022. Naporafenib has been dosed in over 500 patients to date, whereby safety, tolerability, pharmacokinetics (PK),

and pharmacodynamics have been established in both monotherapy and in certain combinations, with clinical proof-of-concept (PoC) data in combination with trametinib (MEKINIST) for patients with NRASm melanoma, which includes NRAS Q61X melanoma, and preliminary clinical PoC data with trametinib for patients with RAS Q61X in NSCLC. Naporafenib complements what we believe to be the deepest, wholly-owned or controlled RAS/MAPK pathway-focused pipeline in the industry.

We are pursuing a broad development strategy for naporafenib that includes a series of SEACRAFT trials designed to evaluate naporafenib's development opportunities in combination with other anti-cancer therapies. We are prioritizing rapid development of naporafenib + trametinib in the Phase 1b SEACRAFT-1 trial in patients with RAS Q61X solid tumors, which dosed its first patient in August 2023, and in the planned Phase 3 SEACRAFT-2 trial in patients with NRASm melanoma. SEACRAFT-1 is supported by clinical PoC data in patients with NRAS Q61X melanoma and preliminary clinical PoC data in patients with KRAS Q61X NSCLC. In May 2023, we executed a clinical trial collaboration and supply agreement (CTCSA) with Novartis in connection with the SEACRAFT-1 trial. Under the terms of the agreement, we are sponsoring and funding the clinical trial and Novartis is providing its MEK inhibitor, trametinib, at no cost. The initiation of SEACRAFT-2 is supported by clinical PoC data in patients with NRASm melanoma, as presented by Novartis at the American Association for Cancer Research Annual Meeting 2022 and European Society for Medical Oncology Congress 2022 medical conferences and as published in March 2023 by de Braud et al. in the *Journal of Clinical Oncology*. We are also exploring additional combinations of naporafenib with other proprietary therapeutic agents in our pipeline as well as with other therapies.

Our next two most-advanced product candidates are ERAS-007 (our oral ERK1/2 inhibitor) and ERAS-601 (our oral SHP2 inhibitor), which target downstream and upstream nodes, respectively, of the RAS/MAPK pathway. We have undertaken a broad clinical development plan across multiple tumor types for ERAS-007, which we refer to as our HERKULES series of clinical trials, that includes both monotherapy and combinations with approved and investigational agents, such as RTK, SHP2, RAS, and/or RAF inhibitors. In May 2021, we dosed the first patient in HERKULES-1, a Phase 1b/2 clinical trial designed to evaluate ERAS-007 as a single agent and in combination with various RAS/MAPK pathway targeting agents in advanced solid tumors. In December 2022, we dosed the first patient to evaluate ERAS-007 in combination with ERAS-601 (the MAPKlamp portion of HERKULES-1) in advanced solid tumors. In September 2021, we dosed the first patient in HERKULES-2, a Phase 1b/2 master protocol clinical trial for ERAS-007 and/or ERAS-601 in combination with various agents in patients with NSCLC. In September 2021, we dosed the first patient in HERKULES-3, a Phase 1b/2 master protocol clinical trial for ERAS-007 in combination with various agents in patients with gastrointestinal (GI) cancers. In connection with our HERKULES-3 trial, we have announced CTCSAs with Pfizer Inc. for its BRAF inhibitor, encorafenib (BRAFTOVI), Eli Lilly and Company (Lilly) for its EGFR antibody, cetuximab (ERBITUX), and Pierre Fabre for its BRAF inhibitor, encorafenib (BRAFTOVI) in key international territories. In all these cases, we are sponsoring and funding the clinical trial and the partner is providing its drug to us at no cost. In June 2022, we announced an additional investigator-sponsored Phase 1b PoC clinical trial to investigate ERAS-007 in combination with a KRAS G12C inhibitor in patients with KRAS G12C-driven NSCLC and CRC to be funded by a grant that the principal investigators received from Stand Up To Cancer. In September 2023, we were informed by the principal investigators that they would not be moving forward with initiating such trial.

The master protocols for each of the HERKULES-2 and -3 Phase 1b/2 clinical trials were designed to provide the flexibility to explore additional combinations and expand into other NSCLC and GI cancer indications, respectively. In October 2022, we reported Phase 1b monotherapy data from HERKULES-1 at the 2022 EORTC-NCI-AACR Molecular Targets and Cancer Therapeutics Symposium (2022 Triple Meeting). These data included preliminary monotherapy safety and PK to support dose selection for combinations of ERAS-007. In May 2023, we announced promising preliminary data for ERAS-007 combinations in patients with GI malignancies as part of two poster presentations that we presented at the American Society of Clinical Oncology Annual Meeting in June 2023.

In June 2023, we provided updates with respect to our HERKULES series of clinical trials. These updates consisted of the following:

- **HERKULES-3: ERAS-007 plus the encorafenib and cetuximab combination (EC) in EC-naïve patients with BRAFm CRC:** We are expanding the evaluation of this combination in EC-naïve patients based on encouraging early efficacy data
- **HERKULES-3: ERAS-007 plus EC in EC-treated patients with BRAFm CRC:** We have gated enrollment of EC-treated patients until we have evaluated the efficacy data in the EC-naïve CRC population
- **HERKULES-2: ERAS-007 plus osimertinib in patients with post-osimertinib EGFR-mutant NSCLC:** We have deprioritized evaluation of this combination in this indication as clinical efficacy data do not support continued evaluation

- **HERKULES-3: ERAS-007 plus palbociclib in patients with KRAS- or NRAS-mutant CRC and KRAS-mutant PDAC:** We have deprioritized evaluation of this combination in this indication as clinical efficacy data do not support continued evaluation
- **HERKULES-1: ERAS-007 plus ERAS-601 in patients with advanced solid tumors:** We have deprioritized evaluation of this combination as dose escalation safety data do not support continued evaluation of regimen tested

With respect to the HERKULES-3 Phase 1b trial for ERAS-007 plus EC in EC-naïve BRAFm CRC patients, we anticipate a Phase 1b dose expansion data readout between the second half of 2023 and the first half of 2024.

ERAS-601 is designed to be a potent and selective oral inhibitor of SHP2, a convergent node for upstream RTK signaling and a critical "on/off switch" that activates RAS-GTP signaling. Activation of SHP2 also drives tumor cell proliferation and development of resistance. ERAS-601 is designed to block oncogenic signal transduction and delay the onset of therapeutic resistance, thereby serving as a backbone of combination therapy. In December 2020, we dosed the first patient in FLAGSHP-1, a Phase 1 clinical trial for ERAS-601 in patients with advanced solid tumors. ERAS-601 combinations are being evaluated in the FLAGSHP-1 clinical trial for patients with advanced solid tumors, including human papillomavirus (HPV)-negative advanced head and neck squamous cell carcinoma (HNSCC). Future development of ERAS-601 combinations may include CRC and other tumor types, based upon the data from the patients enrolled in the FLAGSHP-1 clinical trial. In July 2022, we announced a second CTCSA with Lilly in connection with the FLAGSHP-1 trial. Under the terms of the agreement, we are sponsoring and funding the clinical trial and Lilly is providing its EGFR inhibitor, cetuximab (ERBITUX), at no cost. In October 2022, we reported Phase 1 monotherapy data from FLAGSHP-1 at the 2022 Triple Meeting. These data included preliminary monotherapy safety and PK to support dose selection for combinations of ERAS-601. In April 2023, we announced promising initial Phase 1b dose escalation data from FLAGSHP-1 for ERAS-601 in combination with cetuximab in patients with advanced solid tumors at the American Association for Cancer Research Annual Meeting 2023 medical conference. We anticipate a Phase 1b combination data readout in advanced solid tumors, including HPV-negative HNSCC, in the first half of 2024.

In February 2022, we dosed the first patient in our THUNDERBBOLT-1 Phase 1 clinical trial for ERAS-801, our CNS-penetrant EGFR inhibitor, in patients with recurrent glioblastoma multiforme (GBM). In May 2023, we announced that the US Food and Drug Administration (FDA) granted Fast Track Designation (FTD) to ERAS-801 for the treatment of adult patients with GBM with EGFR gene alterations. Programs that receive FTD may benefit from early and frequent interactions with the FDA during the clinical development process and, if relevant criteria are met, the FDA may consider reviewing portions of a marketing application before the sponsor submits the complete application. In June 2023, we announced that the FDA granted Orphan Drug Designation (ODD) to ERAS-801 for the treatment of malignant glioma, which includes GBM. ODD entitles a party to the potential for seven years of post-approval marketing exclusivity, subject to certain exemptions, and financial incentives such as tax advantages and user fee waivers.

In June 2023, we announced that we deprioritized ERAS-3490, our CNS-penetrant KRAS G12C inhibitor, and would not be actively seeking to enroll patients in the AURORAS-1 Phase 1 clinical trial in patients with KRAS G12C-mutated solid tumors. This deprioritization occurred before enrolling any patients in AURORAS-1 and was due to the increasingly competitive landscape for small- and mid-cap biopharma companies in the KRAS G12C inhibitor market, despite the fact that we believe that ERAS-3490 has the potential for differentiation in this market.

We are also advancing additional programs targeting key oncogenic drivers in the RAS/MAPK pathway, which we will need to successfully progress through discovery and investigational new drug application (IND)-enabling activities prior to advancing these programs into clinical development, if at all.

We do not own or operate, and currently have no plans to establish, any manufacturing facilities. We rely, and expect to continue to rely, on third parties for the manufacture of our product candidates for preclinical and clinical testing, as well as for commercial manufacture if any of our product candidates obtain marketing approval. We are working with our current manufacturers to ensure that we will be able to scale up our manufacturing capabilities to support our clinical plans. We are also in the process of locating and qualifying additional manufacturers to build redundancies into our supply chain. In addition, we rely on third parties to package, label, store, and distribute our product candidates, and we intend to continue to rely on third parties with respect to our commercial products if marketing approval is obtained. We believe that this strategy allows us to maintain a more efficient infrastructure by eliminating the need for us to invest in our own manufacturing facilities, equipment, and personnel while also enabling us to focus our expertise and resources on the design and development of our product candidates.

In December 2022, we completed the 2022 Offering and issued 15,384,616 shares of our common stock at a price to the public of $6.50 per share. Proceeds from the 2022 Offering were $94.9 million, net of underwriting discounts and commissions and offering costs of $5.1 million.

In August 2022, we entered into an Open Market Sale Agreement (the Sale Agreement) with Jefferies LLC (the Agent), pursuant to which we may offer and sell shares of our common stock having an aggregate offering price of up to $200 million from time to time, in “at the market” offerings through the Agent. Sales of the shares of common stock, if any, will be made at prevailing market prices at the time of sale, or as otherwise agreed with the Agent. The Agent will receive a commission from us of up to 3.0% of the gross proceeds of any shares of common stock sold under the Sale Agreement. There have been no shares of our common stock sold under the Sale Agreement as of September 30, 2023.

In July 2021, we completed our IPO and issued 21,562,500 shares of our common stock, including the exercise in full by the underwriters of their option to purchase 2,812,500 shares of our common stock, at a price to the public of $16.00 per share. Our aggregate net proceeds from the offering were $317.0 million, net of underwriting discounts and commissions of $24.2 million and offering costs of $3.8 million.

Since our inception in 2018, we have devoted substantially all of our resources to organizing and staffing our company, business planning, raising capital, identifying, acquiring, and in-licensing our product candidates, establishing our intellectual property portfolio, conducting research, preclinical studies and clinical trials, establishing arrangements with third parties for the manufacture of our product candidates and related raw materials, and providing general and administrative support for these operations. We do not have any products approved for sale and have not generated any revenue. As of September 30, 2023, we have raised a total of $765.4 million to fund our operations, comprised primarily of gross proceeds from our IPO and 2022 Offering and the sale and issuance of convertible preferred stock. As of September 30, 2023, we had cash, cash equivalents and marketable securities of $343.6 million.

We have incurred significant operating losses since inception. Our net losses were $30.4 million and $35.5 million for the three months ended September 30, 2023 and 2022, respectively, and $95.3 million and $107.6 million for the nine months ended September 30, 2023 and 2022, respectively. As of September 30, 2023, we had an accumulated deficit of $576.3 million. We expect our expenses and operating losses will increase substantially for the foreseeable future, particularly if and as we conduct our ongoing and planned clinical trials and preclinical studies; continue our research and development activities; utilize third parties to manufacture our product candidates and related raw materials; hire additional personnel; acquire, in-license, or develop additional product candidates; expand and protect our intellectual property; and incur additional costs associated with being a public company. If we obtain regulatory approval for any of our product candidates, we expect to incur significant commercialization expenses related to product sales, marketing, manufacturing, and distribution. In addition, as our product candidates progress through development and toward commercialization, we will need to make milestone payments to the licensors and other third parties from whom we have in-licensed or acquired our product candidates. Our net losses may fluctuate significantly from quarter-to-quarter and year-to-year, depending on the timing of our clinical trials and preclinical studies and our expenditures on other research and development activities.

Based upon our current operating plans, we believe that our cash, cash equivalents and marketable securities as of September 30, 2023 will be sufficient to fund our operations into the second half of 2025. We do not expect to generate any revenues from product sales until we successfully complete development and obtain regulatory approval for one or more of our product candidates, which we expect will take a number of years and may never occur. Accordingly, until such time as we can generate significant revenue from sales of our product candidates, if ever, we expect to finance our cash needs through equity offerings, debt financings or other capital sources, including potential collaborations, licenses, and other similar arrangements. However, we may be unable to raise additional funds or enter into such other arrangements when needed on favorable terms or at all. Our failure to raise capital or enter into such other arrangements when needed would have a negative impact on our financial condition and could force us to delay, limit, reduce, or terminate our research and development programs or other operations, or grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves.

Our financial condition and results of operations may also be impacted by other factors we may not be able to control, such as geopolitical and economic events. We do not believe that such factors had a material adverse impact on our results of operations during the three months ended September 30, 2023.

Our acquisition and license agreements

We have entered into in-license and acquisition agreements pursuant to which we in-licensed or acquired certain intellectual property rights related to our product candidates and development programs.

For additional information regarding these agreements, see the section titled “Business—Our acquisition and license agreements” in our Annual Report on Form 10-K for the year ended December 31, 2022 filed with the SEC on March 23, 2023.

Components of results of operations

Revenue

We do not expect to generate any revenue from the sale of products unless and until such time that our product candidates have advanced through clinical development and obtained regulatory approval, if ever. If we fail to complete preclinical and clinical development of product candidates or obtain regulatory approval for them, our ability to generate future revenues, and our results of operations and financial position would be adversely affected.

Operating expenses

Research and development

Research and development expenses consist of external and internal costs associated with our research and development activities, including our discovery and research efforts and the preclinical and clinical development of our product candidates. Research and development costs are expensed as incurred. Our research and development expenses include:

- external costs, including expenses incurred under arrangements with third parties, such as contract research organizations (CROs), contract manufacturing organizations (CMOs), consultants and our scientific advisors; and
- internal costs, including:
    - employee-related expenses, including salaries, benefits, and stock-based compensation for those individuals involved in research and development efforts;
    - the costs of laboratory supplies and acquiring, developing and manufacturing preclinical study materials; and
    - facilities and depreciation, which include direct and allocated expenses for rent of facilities and depreciation.

The following table summarizes our research and development expenses incurred for the following periods (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Naporafenib[(1)]	$ 10,285	$ —	$ 21,576	$ —
ERAS-007	3,427	9,519	16,387	27,439
ERAS-601	5,852	5,156	11,211	15,091
Other clinical programs	817	2,119	10,542	6,689
Other discovery and preclinical programs	4,832	11,390	19,300	33,882
Total research and development expenses	$ 25,213	$ 28,184	$ 79,016	$ 83,101

(1) We in-licensed naporafenib in December 2022.

We expect our research and development expenses to increase substantially for the foreseeable future as we continue to conduct our ongoing research and development activities, conduct clinical trials and advance our preclinical research programs toward clinical development, particularly as more of our product candidates move into later stages of development, which typically cost more. The process of conducting clinical trials and preclinical studies necessary to obtain regulatory approval is costly and time-consuming. We may never succeed in achieving marketing approval for any of our product candidates.

The timelines and costs with research and development activities are uncertain, can vary significantly for each product candidate and program and are difficult to predict. We anticipate we will make determinations as to which product candidates and programs to pursue and how much funding to direct to each product candidate and program on an ongoing basis in response to preclinical and clinical results, regulatory developments, ongoing assessments as to each product candidate's and program's commercial potential, and our ability to enter into collaborations, licenses, or other similar agreements to the extent we determine the resources or expertise of a third-party would be beneficial for a given product candidate or program. We will need to raise substantial additional capital in the future. In addition, we cannot forecast which product candidates and programs may be subject to future collaborations, licenses, or other agreements, when such arrangements will be secured, if at all, and to what degree such arrangements would affect our development plans and capital requirements.

Our development costs may vary significantly based on factors such as:

- the number and scope of preclinical and IND-enabling studies and clinical trials;
- per patient trial costs;
- the number of trials required for approval;
- the number of sites included in the trials;
- the countries in which the trials are conducted;
- the length of time required to enroll eligible patients;
- the number of patients that participate in the trials;
- the number of doses that patients receive;
- the drop-out or discontinuation rates of patients;
- potential additional safety monitoring requested by regulatory agencies;
- the duration of patient participation in the trials and follow-up;
- the cost and timing of manufacturing our product candidates;
- the phase of development of our product candidates;
- the efficacy and safety profile of our product candidates;
- the timing, receipt and terms of any approvals from applicable regulatory authorities;
- maintaining a continued acceptable safety profile of our products following approval, if any;
- significant and changing government regulation and regulatory guidance;
- the impact of any interruptions to our operations or to those of third parties with whom we work due to geopolitical and economic events; and
- the extent to which we establish additional collaboration, license or other arrangements.

In-process research and development

In-process research and development expenses include rights acquired as part of asset acquisitions or in-licenses to develop and commercialize product candidates. Upfront payments that relate to the acquisition of a new product candidate, as well as pre-commercial milestone payments, are immediately expensed as in-process research and development in the period in which they are incurred, provided that the new product candidate did not also include processes or activities that would constitute a “business” as defined under US generally accepted accounting principles (US GAAP), the product candidate has not achieved regulatory approval for marketing and, absent obtaining such approval, has no established alternative future use.

In-process research and development expenses consist primarily of our upfront payments, milestone payments, and our stock issuances in connection with our acquisition and in-license agreements.

General and administrative

General and administrative expenses consist primarily of employee-related expenses, including salaries, benefits and stock-based compensation, for employees in our finance, accounting, legal, information technology, business development and support functions. Other general and administrative expenses include allocated facility and depreciation related costs not otherwise included in research and development expenses and professional fees for auditing, tax, intellectual property and legal services. Costs related to filing and pursuing patent applications are recognized as general and administrative expenses as incurred since recoverability of such expenditures is uncertain.

We expect our general and administrative expenses will increase substantially for the foreseeable future as we continue to increase our general and administrative headcount to support our continued research and development activities and, if any product candidates receive marketing approval, commercialization activities, as well as to support our operations generally.

Other income (expense), net

Interest income

Interest income consists primarily of interest earned on our cash, cash equivalents and marketable securities.

Results of operations

Comparison of the three months ended September 30, 2023 and 2022

The following table summarizes our results of operations for the three months ended September 30, 2023 and 2022 (in thousands):

	Three Months Ended September 30,		
	2023	2022	Change
Operating expenses:			
Research and development	$ 25,213	$ 28,184	$ (2,971)
In-process research and development	—	—	—
General and administrative	9,445	8,778	667
Total operating expenses	34,658	36,962	(2,304)
Loss from operations	(34,658)	(36,962)	2,304
Total other income (expense), net	4,297	1,473	2,824
Net loss	$ (30,361)	$ (35,489)	$ 5,128

Research and development expenses

Research and development expenses were $25.2 million for the three months ended September 30, 2023 compared to $28.2 million for the three months ended September 30, 2022. The decrease of $3.0 million was primarily driven by decreases of $4.8 million in expenses incurred in connection with clinical trials, preclinical studies and discovery activities and $0.9 million in outsourced services and consulting fees, resulting primarily from our pipeline prioritization decisions, partially offset by a $2.2 million increase in personnel costs due to an increase in headcount and the employee retention credit of $1.5 million recorded during the three months ended September 30, 2022.

In-process research and development expenses

In-process research and development expenses were $0 for the three months ended September 30, 2023 and 2022.

General and administrative expenses

General and administrative expenses were $9.4 million for the three months ended September 30, 2023 compared to $8.8 million for the three months ended September 30, 2022. The increase of $0.7 million was primarily driven by an increase of $1.0 million in personnel costs due to an increase in headcount and the employee retention credit of $0.7 million recorded during the three months ended September 30, 2022, and an increase of $0.7 million in stock-based compensation expense, partially offset by a $1.0 million decrease in legal and accounting fees.

Other income (expense), net

Other income (expense), net was $4.3 million for the three months ended September 30, 2023 compared to $1.5 million for the three months ended September 30, 2022. The increase of $2.8 million was primarily related to an increase in interest earned on our cash, cash equivalents and marketable securities during the three months ended September 30, 2023.

Comparison of the nine months ended September 30, 2023 and 2022

The following table summarizes our results of operations for the nine months ended September 30, 2023 and 2022 (in thousands):

	Nine Months Ended September 30,		
	2023	2022	Change
Operating expenses:			
Research and development	$ 79,016	$ 83,101	$ (4,085)
In-process research and development	—	2,000	(2,000)
General and administrative	28,637	24,271	4,366
Total operating expenses	107,653	109,372	(1,719)
Loss from operations	(107,653)	(109,372)	1,719
Total other income (expense), net	12,312	1,817	10,495
Net loss	$ (95,341)	$ (107,555)	$ 12,214

Research and development expenses

Research and development expenses were $79.0 million for the nine months ended September 30, 2023 compared to $83.1 million for the nine months ended September 30, 2022. The decrease of $4.1 million was primarily driven by decreases of $11.2 million in expenses incurred in connection with clinical trials, preclinical studies and discovery activities and $3.2 million in outsourced services and consulting fees, resulting primarily from our pipeline prioritization decisions, partially offset by a $4.4 million increase in facilities-related expenses and depreciation primarily due to our new San Diego and South San Francisco facilities which we moved into in the second and third quarters of 2022, respectively, a $3.6 million increase in personnel costs due to an increase in headcount and the employee retention credit of $1.5 million recorded during the nine months ended September 30, 2022, and a $2.3 million increase in stock-based compensation expense.

In-process research and development expenses

In-process research and development expenses were $0 for the nine months ended September 30, 2023 compared to $2.0 million for the nine months ended September 30, 2022. In-process research and development expenses for the nine months ended September 30, 2022 related to a development milestone payment of $2.0 million in connection with our license agreement with Katmai Pharmaceuticals, Inc.

General and administrative expenses

General and administrative expenses were $28.6 million for the nine months ended September 30, 2023 compared to $24.3 million for the nine months ended September 30, 2022. The increase of $4.4 million was primarily driven by increases of $3.1 million in stock-based compensation expense, $1.8 million in personnel costs due to an increase in headcount and the employee retention credit of $0.7 million recorded during the nine months ended September 30, 2022, and $0.5 million in facilities and office-related expenses, partially offset by a decrease in legal and accounting fees of $0.8 million.

Other income (expense), net

Other income (expense), net was $12.3 million for the nine months ended September 30, 2023 compared to $1.8 million for the nine months ended September 30, 2022. The increase of $10.5 million was primarily related to an increase in interest earned on our cash, cash equivalents and marketable securities during the nine months ended September 30, 2023.

Liquidity and capital resources

Sources of liquidity

In July 2021, we completed our IPO and issued 21,562,500 shares of our common stock, including the exercise in full by the underwriters of their option to purchase 2,812,500 shares of our common stock, at a price to the public of $16.00 per share. Our aggregate net proceeds from the offering were $317.0 million, net of underwriting discounts and commissions of $24.2 million and offering costs of $3.8 million. Prior to the IPO, we received aggregate gross proceeds of $320.4 million from the sale of shares of our convertible preferred stock.

In August 2022, we entered into the Sale Agreement with the Agent, pursuant to which we may offer and sell shares of our common stock having an aggregate offering price of up to $200 million from time to time, in “at the market” offerings through the Agent. Sales of the shares of common stock, if any, will be made at prevailing market prices at the time of sale, or as otherwise agreed with the Agent. The Agent will receive a commission from us of up to 3.0% of the gross proceeds of any shares of common stock sold under the Sale Agreement. There have been no shares of our common stock sold under the Sale Agreement as of September 30, 2023.

In December 2022, we completed the 2022 Offering and issued 15,384,616 shares of our common stock at a price to the public of $6.50 per share. Proceeds from the 2022 Offering were $94.9 million, net of underwriting discounts and commissions and offering costs of $5.1 million.

Future capital requirements

As of September 30, 2023, we had cash, cash equivalents and marketable securities of $343.6 million. Based upon our current operating plans, we believe that our cash, cash equivalents and marketable securities will be sufficient to fund our operations into the second half of 2025. However, our forecast of the period of time through which our financial resources will be adequate to support our operations is a forward-looking statement that involves risks and uncertainties, and actual results could vary materially. We have based this estimate on assumptions that may prove to be wrong, and we could deplete our capital resources sooner than we expect. Additionally, the process of conducting preclinical studies and testing product candidates in clinical trials is costly, and the timing of progress and expenses in these studies and trials is uncertain.

Our future capital requirements are difficult to forecast and will depend on many factors, including but not limited to:

- the type, number, scope, progress, expansions, results, costs and timing of discovery, preclinical studies and clinical trials of our product candidates that we are pursuing or may choose to pursue in the future, including the costs of any third-party products used in our combination clinical trials that are not covered by such third party or other sources;
- the costs and timing of manufacturing for our product candidates with CMOs, including commercial manufacturing, if any product candidate is approved;
- the costs, timing and outcome of regulatory review of our product candidates;
- the costs of obtaining, maintaining and enforcing our patents and other intellectual property rights;
- our efforts to enhance operational systems and hire additional personnel to satisfy our obligations as a public company, including enhanced internal controls over financial reporting;
- the costs associated with hiring additional personnel, consultants, and CROs as our preclinical and clinical activities increase;
- the timing and amount of the milestone or other payments we must make to the licensors and other third parties from whom we have in-licensed or acquired our product candidates or technologies;
- the costs and timing of establishing or securing sales and marketing capabilities if any product candidate is approved;
- our ability to achieve sufficient market acceptance, coverage and adequate reimbursement from third-party payors and adequate market share and revenue for any approved products;
- patients' willingness to pay out-of-pocket for any approved products in the absence of coverage and/or adequate reimbursement from third-party payors;
- the terms and timing of establishing and maintaining collaborations, licenses and other similar arrangements;
- any delays and cost increases that result from geopolitical and economic events; and
- costs associated with any products or technologies that we may in-license or acquire.

We have no other committed sources of capital. Until we can generate a sufficient amount of product revenue to finance our cash requirements, if ever, we expect to finance our future cash needs primarily through equity offerings (including through the Sale Agreement), debt financings or other capital sources, including potential collaborations, licenses and other similar arrangements. However, we may be unable to raise additional funds or enter into such other arrangements when needed on favorable terms or at all. To the extent that we raise additional capital through the sale of equity or convertible debt securities, the ownership interest of our stockholders will be or could be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect the rights of our common stockholders. Debt financing, 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 additional funds through collaborations, licensing, or other similar arrangements with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs or product candidates or 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 research and development programs or other operations, or grant rights to develop and market product candidates to third parties that we would otherwise prefer to develop and market ourselves.

Cash flows

The following table shows a summary of our cash flows for the periods presented (in thousands):

	Nine Months Ended September 30,	
	2023	2022
Net cash (used in) provided by:		
Operating activities	$ (76,429)	$ (76,892)
Investing activities	(95,765)	(66,214)
Financing activities	839	1,879
Net decrease in cash, cash equivalents and restricted cash	$ (171,355)	$ (141,227)

Operating activities

Cash used in operating activities was $76.4 million during the nine months ended September 30, 2023, primarily resulting from a net loss of $95.3 million and accretion on marketable securities of $4.8 million, partially reduced by stock-based compensation expense of $20.1 million, depreciation and amortization expense of $2.8 million, and changes in operating assets and liabilities of $0.8 million. Net cash provided by changes in operating assets and liabilities consisted primarily of an increase in operating lease assets and liabilities, net of $3.3 million primarily due to the receipt of $2.3 million in reimbursement from our landlord for tenant improvements, and an increase in accounts payable of $0.8 million, partially offset by a decrease in accrued expenses and other current and long-term liabilities of $3.3 million.

Cash used in operating activities was $76.9 million during the nine months ended September 30, 2022, primarily resulting from a net loss of $107.6 million, partially reduced by changes in operating assets and liabilities of $12.4 million, stock-based compensation of $14.7 million, in-process research and development expenses of $2.0 million, which are reflected in investing activities, and depreciation expense of $1.7 million. Net cash provided by changes in operating assets and liabilities consisted primarily of an increase in operating lease assets and liabilities of $12.4 million primarily due to the receipt of $14.2 million in reimbursement from our landlord for tenant improvements and increases in accounts payable, accrued expenses and other current liabilities of $4.5 million, partially offset by an increase in prepaid expenses and other current and long-term assets of $4.5 million.

Investing activities

Net cash used in investing activities was $95.8 million during the nine months ended September 30, 2023 as compared to $66.2 million during the nine months ended September 30, 2022. The increase in cash used in investing activities of $29.6 million was primarily the result of an increase in purchases of marketable securities of $158.8 million and an increase in in-process research and development of $18.0 million, offset by an increase in maturities of marketable securities of $133.3 million, and decreases in purchases of property and equipment of $12.0 million and payments made for investments in equity securities of $2.0 million.

Financing activities

Net cash provided by financing activities was $0.8 million during the nine months ended September 30, 2023 as compared to $1.9 million during the nine months ended September 30, 2022. During the nine months ended September 30, 2023, we received $0.5 million from the issuance of common stock under our Employee Stock Purchase Plan (ESPP) and $0.3 million from the exercise of stock options. During the nine months ended September 30, 2022, we received $1.3 million from the exercise of stock options and $0.6 million from the issuance of common stock under our ESPP.

Contractual obligations and commitments

As of September 30, 2023, there have been no material changes outside the ordinary course of our business to the contractual obligations we reported in “Management’s discussion and analysis of financial condition and results of operations – Cash requirements due to contractual obligations and other commitments,” included in our Annual Report on Form 10-K for the year ended December 31, 2022 filed with the SEC on March 23, 2023.

Critical accounting policies and estimates

This management discussion and analysis of financial condition and results of operations is based on our condensed consolidated financial statements, which have been prepared in accordance with US GAAP. The preparation of these condensed consolidated financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue and expenses. On an ongoing basis, we evaluate these estimates and judgments. We base our estimates on historical experience and on various assumptions that we believe to be reasonable under the circumstances. These estimates and assumptions form the basis for making judgments about the carrying values of assets and liabilities and the recording of revenue and expenses that are not readily apparent from other sources. Actual results may differ materially from these estimates. As of September 30, 2023, there have been no material changes to our critical accounting policies and estimates from those disclosed in "Management's discussion and analysis of financial condition and results of operations – Critical accounting policies and estimates," included in our Annual Report on Form 10-K for the year ended December 31, 2022 filed with the SEC on March 23, 2023.

Recently issued and adopted accounting pronouncements

See Note 2 to our condensed consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q for recently issued and adopted accounting pronouncements.

Emerging growth company and smaller reporting company status

As an emerging growth company under the Jumpstart Our Business Startups Act of 2012 (the JOBS Act), we can take advantage of an extended transition period for complying with new or revised accounting standards. This allows an emerging growth company to delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have elected to avail ourselves of this exemption from new or revised accounting standards and, therefore, our condensed consolidated financial statements may not be comparable to companies that comply with new or revised accounting pronouncements as of public company effective dates. We also intend to rely on other exemptions provided by the JOBS Act, including without limitation, not being required to comply with the auditor attestation requirements of Section 404(b) of the Sarbanes-Oxley Act of 2002 (Sarbanes-Oxley).

We will remain an emerging growth company until the earliest of (i) the last day of the fiscal year following the fifth anniversary of the consummation of our IPO; (ii) the last day of the fiscal year in which we have total annual gross revenue of at least $1.235 billion; (iii) the last day of the fiscal year in which we are deemed to be a "large accelerated filer" as defined in Rule 12b-2 under the Exchange Act, which would occur if the market value of our common stock held by non-affiliates exceeded $700.0 million as of the last business day of the second fiscal quarter of such year; or (iv) the date on which we have issued more than $1.0 billion in nonconvertible debt securities during the prior three-year period.

We are also a smaller reporting company as defined in the Exchange Act. We may continue to be a smaller reporting company even after we are no longer an emerging growth company. We may take advantage of certain of the scaled disclosures available to smaller reporting companies and will be able to take advantage of these scaled disclosures for so long as our voting and non-voting common stock held by non-affiliates is less than $250.0 million measured on the last business day of our second fiscal quarter, or our annual revenue is less than $100.0 million during the most recently completed fiscal year and our voting and non-voting common stock held by non-affiliates is less than $700.0 million measured on the last business day of our second fiscal quarter.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

As of September 30, 2023, there have been no material changes surrounding our market risk, including interest rate risk, foreign currency exchange risk, and inflation risk, from the discussion provided in "Management's Discussion and Analysis of Financial Condition and Results of Operations – Quantitative and Qualitative Disclosures About Market Risk" in our Annual Report on Form 10-K for the year ended December 31, 2022 filed with the SEC on March 23, 2023.

Item 4. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our periodic and current reports that we file with the SEC is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate, to allow timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, management recognized that any controls and procedures, no matter how well designed and operated, can provide only reasonable and not absolute assurance of achieving the desired control objectives. In reaching a reasonable level of assurance, management necessarily was required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures. In addition, the design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions; over time, controls may become inadequate because of changes in conditions, or the degree of compliance with policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

Our management, with the participation of our principal executive officer and our principal financial officer, evaluated, as of the end of the period covered by this Quarterly Report on Form 10-Q, the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act). Based on that evaluation, our principal executive officer and principal financial officer have concluded that, as of September 30, 2023, our disclosure controls and procedures were effective at the reasonable assurance level.

Changes in Internal Control Over Financial Reporting

There have been no changes in our internal control over financial reporting during the quarter ended September 30, 2023 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II—OTHER INFORMATION

Item 1. Legal Proceedings.

We are not currently a party to any material proceedings. From time to time, we may become involved in legal proceedings or be subject to claims arising in the ordinary course of our business. Regardless of outcome, such proceedings or claims can have an adverse impact on us because of defense and settlement costs, diversion of resources and other factors, and there can be no assurances that favorable outcomes will be obtained.

Item 1A. Risk Factors.

There have been no material changes to the risk factors set forth in Part I, Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2022 filed with the SEC on March 23, 2023.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds.

Unregistered Sales of Equity Securities

None.

Use of Proceeds

On July 15, 2021, the SEC declared effective our registration statement on Form S-1 (File No. 333-257436), as amended, filed in connection with our IPO. Our IPO closed on July 20, 2021, and we issued and sold 21,562,500 shares of our common stock at a price to the public of $16.00 per share, which included the exercise in full of the underwriters' option to purchase additional shares. We received gross proceeds from our IPO of $345.0 million, before deducting underwriting discounts and commissions of $24.2 million and offering costs of $3.8 million. The managing underwriters of the offering were J.P. Morgan Securities LLC, Morgan Stanley & Co. LLC, BofA Securities, Inc., Evercore Group L.L.C. and Guggenheim Securities, LLC. No offering costs were paid or are payable, directly or indirectly, to our directors or officers, to persons owning 10% or more of any class of our equity securities or to any of our affiliates.

As of September 30, 2023, we have used approximately $268.4 million of the proceeds from our IPO for general corporate purposes, including to fund the research and development of ERAS-007, ERAS-601 and our other RAS/MAPK pathway-focused pipeline programs. There has been no material change in the planned use of such proceeds from that described in the prospectus for our IPO.

Item 3. Defaults Upon Senior Securities.

Not applicable.

Item 4. Mine Safety Disclosures.

Not applicable.

Item 5. Other Information.

Not applicable.

Item 6. Exhibits.

Exhibit Number	Exhibit Description	Incorporated by Reference			Filed Herewith
		Form	Date	Number	
3.1	Amended and Restated Certificate of Incorporation of Erasca, Inc.	8-K	7/20/2021	3.1	
3.2	Amended and Restated Bylaws of Erasca, Inc.	8-K	7/20/2021	3.2	
4.1	Specimen stock certificate evidencing the shares of common stock	S-1	6/25/2021	4.1	
4.2	Amended and Restated Stockholders Agreement, dated April 15, 2020, by and among the Registrant and certain of its stockholders	S-1	6/25/2021	4.2	
10.1†	First Amendment to Exclusive License Agreement, dated August 7, 2023, by and between Novartis Pharma AG and the Registrant				X
31.1	Certification of Chief Executive Officer of Erasca, Inc., as required by Rule 13a-14(a) or Rule 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002				X
31.2	Certification of Chief Financial Officer of Erasca, Inc., as required by Rule 13a-14(a) or Rule 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002				X
32.1*	Certification of Chief Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002				X
32.2*	Certification of Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002				X
101.INS	Inline XBRL Instance Document – the instance document does not appear in the Interactive Data File because XBRL tags are embedded within the Inline XBRL document.				X
101.SCH	Inline XBRL Taxonomy Extension Schema Document				X
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document				X
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document				X
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document				X
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document				X
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)				X

† Portions of this exhibit have been omitted for confidentiality purposes.

* This certification is deemed not filed for purpose of section 18 of the Exchange Act or otherwise subject to the liability of that section, nor shall it be deemed incorporated by reference into any filing under the Securities Act or the Exchange Act.

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.

Erasca, Inc.

Date: November 9, 2023

By: /s/ Jonathan E. Lim, M.D.
Jonathan E. Lim, M.D.
Chairman, Chief Executive Officer and Co-Founder
(Principal Executive Officer)

Date: November 9, 2023

By: /s/ David M. Chacko, M.D.
David M. Chacko, M.D.
Chief Financial Officer and Chief Business Officer
(Principal Financial and Accounting Officer)

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY [***], HAS BEEN OMITTED BECAUSE IT IS BOTH (1) NOT MATERIAL AND (2) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED

First Amendment to Exclusive License Agreement

This First Amendment to the Exclusive License Agreement (the "*First Amendment*") effective as of August 7, 2023 (the "*Amendment Effective Date*"), is made by and between Erasca, Inc. ("*Erasca*") and Novartis Pharma AG ("*Novartis*") and amends the Exclusive License Agreement between the parties, dated December 9, 2022 (the "*Agreement*").

BACKGROUND

WHEREAS, the Parties wish to amend the Exclusive License Agreement to reflect certain changes with respect to support by Novartis to Erasca with respect to data and documentation for Erasca filings with regulatory authorities. Unless otherwise defined herein, capitalized terms will have the definitions given them in the Agreement.

Now, therefore, the Parties hereby agree as follows:

1) New Section 5.6.7. A new Section 5.6.7 is added as follows:

"5.6.7 Notwithstanding the provisions of Section 5.6.2:

(a) Upon request by Erasca after receipt of a request, inquiry, or notice from a Regulatory Authority, Novartis shall use Commercially Reasonable Efforts to, within [***] business days of such request from Erasca, answer questions and/or provide additional information reasonably necessary for Erasca to respond to such Regulatory Authority. If Novartis anticipates being unable to provide such answers and/or information within such [***] business day period using Commercially Reasonable Efforts, Novartis shall promptly inform Erasca of the time in which such answers and information will be provided and Novartis shall use Commercially Reasonable Efforts to provide such answers and/or information within such modified time period.

(b) In addition to the obligations of Novartis in Section 5.6.7(a), upon request by Erasca, Novartis shall use Commercially Reasonable Efforts to, within [***] business days of such request from Erasca, answer questions, respond to requests related to Erasca's preparation of briefing documents with Regulatory Authorities, and/or correct errors or discrepancies regarding data previously provided to Erasca and/or provide additional information reasonably necessary to answer such questions/requests or correct such errors or deficiencies. If Novartis anticipates being unable to

provide such answers and information within such [***] business day period using Commercially Reasonable Efforts, Novartis shall promptly inform Erasca of the time in which such answers and information will be provided and Novartis shall use Commercially Reasonable Efforts to provide such answers and/or information within such modified time period.

(c) These obligations shall continue after December 31, 2023.

(d) Beginning on [***], any activities performed by Novartis pursuant to this Section 5.6.7 shall be subject to the payment terms provided in Section 5.6.3.

2) Amendment and Restatement of the Antepenultimate and Penultimate Sentence of Section 5.8. The antepenultimate (*i.e.*, third from the last) sentence and penultimate (*i.e.*, second from the last) sentence of Section 5.8 shall each be deleted in their entirety and replaced with the following:

"The pick-up of each shipment of Material must be completed by Erasca by the later of: (a) [***] days after Novartis provides written notice to Erasca that any such Material is available for pick-up, and (b) [***] (the "*Material Pick-Up Period*"). Notwithstanding anything to the contrary in Section 5.8.2(d), there shall be no more than [***] additional shipments of Material after the Amendment Effective Date that is drug substance from Novartis to Erasca and no more than [***] shipments from each Novartis location of each type of other Material from Novartis to Erasca. Any such Material not picked up by the end of the Material Pick-Up Period may be disposed of by Novartis, in Novartis' sole discretion."

3) Entire Agreement. This First Amendment, together with the Agreement, constitute the entire agreement between the Parties. All other terms and provisions of the Agreement, except as expressly amended by this First Amendment, remain in full force and effect.

4) Execution by Counterparts. This First Amendment may be executed in two or more counterparts, each of which shall be deemed an original and together shall be deemed one and the same instrument.

[Signatures Follow]

IN WITNESS WHEREOF, the Parties, intending to be legally bound, have caused this First Amendment to be executed by their duly authorized representatives.

ERASCA, INC.
By: /s/ Jonathan Lim
Name: Jonathan Lim
Title: Chairman and CEO
Date: August 10, 2023

NOVARTIS INTERNATIONAL PHARMACEUTICAL AG
By: /s/ Simone Pfirter
Name: Simone Pfirter
Title: Head NIBR General Legal Europe
Date: August 7, 2023

By: /s/ Petra Grohmann-Moesching
Name: Petra Grohmann-Moesching
Title: Head Finance NIBR Europe
Date: August 10, 2023

Exhibit 31.1

CERTIFICATION

I, Jonathan E. Lim, M.D., certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Erasca, 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)) for the registrant and have:
   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 9, 2023

By: /s/ Jonathan E. Lim, M.D.

Jonathan E. Lim, M.D.

Chairman, Chief Executive Officer and Co-Founder
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION

I, David M. Chacko, M.D., certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Erasca, 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)) for the registrant and have:
   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 9, 2023

By: /s/ David M. Chacko, M.D.

David M. Chacko, M.D.

Chief Financial Officer and Chief Business Officer
(Principal Financial and Accounting Officer)

Exhibit 32.1

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

In connection with the Quarterly Report on Form 10-Q of Erasca, Inc. (the "Company") for the period ended September 30, 2023 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge:

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

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

Date: November 9, 2023

By: /s/ Jonathan E. Lim, M.D.

Jonathan E. Lim, M.D.

Chairman, Chief Executive Officer and Co-Founder
(Principal Executive Officer)

Exhibit 32.2

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

In connection with the Quarterly Report on Form 10-Q of Erasca, Inc. (the "Company") for the period ended September 30, 2023 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge:

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

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

Date: November 9, 2023

By: /s/ David M. Chacko, M.D.

David M. Chacko, M.D.

Chief Financial Officer and Chief Business Officer
(Principal Financial and Accounting Officer)