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 March 31, 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: 001-40672

RANI THERAPEUTICS HOLDINGS, INC.

(Exact Name of Registrant as Specified in its Charter)

Delaware	**86-3114789**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
2051 Ringwood Avenue San Jose, California	**95131**
(Address of principal executive offices)	**(Zip Code)**

Registrant's telephone number, including area code: (408) 457-3700

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Class A common stock, par value $0.0001 per share	RANI	The Nasdaq Stock Market LLC

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 May 8, 2023, the registrant had 25,376,236 shares of Class A common stock, $0.0001 par value per share, outstanding, 24,116,444 shares of Class B common stock, $0.0001 par value per share, outstanding and no shares of Class C common stock, $0.0001 par value per share, outstanding. Certain holders of units of the registrant's consolidated subsidiary, Rani Therapeutics, LLC, who do not hold shares of the registrant's Class B common stock can exchange their units of Rani Therapeutics, LLC for 1,387,471 shares of the registrant's Class A common stock.

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Unless otherwise stated or the context otherwise requires, the terms "we," "us," and "our," and similar references refer to Rani Therapeutics Holdings, Inc. ("Rani Holdings") and its consolidated subsidiary, Rani Therapeutics, LLC ("Rani LLC") and, prior to December 15, 2022, Rani Management Systems, Inc. ("RMS"). RMS was dissolved as of December 15, 2022.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q, including the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations," contains forward-looking statements. All statements other than statements of historical facts contained in this Quarterly Report on Form 10-Q, including statements regarding our future results of operations and consolidated financial position, business strategy, product candidates, planned preclinical studies and clinical trials, results of clinical trials, research and development costs, manufacturing costs, regulatory approvals, development and advancement of our oral delivery technology, timing and likelihood of success, potential partnering activities as well as plans and objectives of management for future operations, are forward-looking statements. These statements involve known and unknown risks, uncertainties, and other important factors that are in some cases beyond our control and may cause our actual results, performance, or achievements to be materially different from any future results, performance, or achievements expressed or implied by the forward-looking statements.

In some cases, you can identify forward-looking statements by terms such as "may," "will," "should," "would," "expect," "plan," "anticipate," "could," "intend," "target," "project," "believe," "estimate," "predict," "potential," "seek," "aim," or "continue" or the negative of these terms or other similar expressions. Forward-looking statements contained in this Quarterly Report on Form 10-Q include, but are not limited to, statements about:

- the progress and focus of our current and future clinical trials in the United States and abroad, and the reporting of data from those trials;
- our ability to advance product candidates into and successfully complete clinical trials;
- the beneficial characteristics, safety, efficacy, and therapeutic effects of our product candidates;
- our potential and ability to successfully manufacture and supply our product candidates for clinical trials and for commercial use, if approved;
- our ability to complete development of the RaniPill HC or any redesign and conduct additional preclinical and clinical studies of the RaniPill HC or any future design of the RaniPill capsule to accommodate target payloads that are larger than the payload capacity of the RaniPill GO capsule currently used for our product candidates;
- our ability to further develop and expand our platform technology;
- our ability to utilize our technology platform to generate and advance additional product candidates;
- the accuracy of our estimates regarding expenses, future revenue, capital requirements, and needs for additional financing;
- our financial performance;
- our plans relating to commercializing our product candidates, if approved;
- our ability to selectively enter into strategic partnership and the expected potential benefits thereof;
- the implementation of our strategic plans for our business and product candidates;
- our ability to continue to scale and optimize our manufacturing processes by expanding our use of automation;
- our estimates of the number of patients in the United States who suffer from the indications we target and the number of patients that will enroll in our clinical trials;
- the size of the market opportunity for our product candidates in each of the indications we target;
- our ability to continue to innovate and expand our intellectual property by developing novel formulations and new applications of the RaniPill capsule;
- our plans and ability to obtain or protect intellectual property rights, including extensions of existing patent terms where available;
- the scope of protection we are able to establish and maintain for intellectual property rights, including our technology platform and product candidates;

- the sufficiency of our existing cash and cash equivalents to fund our future operating expenses and capital expenditure requirements;
- developments relating to our competitors and our industry, including competing product candidates and therapies;
- our realization of any benefit from our organizational structure, taking into account our obligations under the Tax Receivable Agreement (defined herein) and the impact of any payments required to be made thereunder on our liquidity and financial condition; and
- our expectations regarding the period during which we will qualify as an emerging growth company under the Jumpstart Our Business Startups Act of 2012 (the "JOBS Act").

These forward-looking statements are subject to a number of risks, uncertainties, and assumptions described in the section titled "Risk Factors" and elsewhere in our Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 22, 2023. Because forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified, you should not rely on these forward-looking statements as predictions of future events. 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, or otherwise.

In addition, statements that "we believe" and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based upon information available to us as of the date of this Quarterly Report on Form 10-Q, and while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain and you are cautioned not to unduly rely upon these statements.

RANI THERAPEUTICS HOLDINGS, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS
(in thousands, except par value)

	March 31, 2023 (Unaudited)	December 31, 2022
Assets		
Current assets:		
Cash and cash equivalents	$ 18,984	$ 27,007
Restricted cash equivalents	500	500
Marketable securities	67,803	71,475
Prepaid expenses and other current assets	1,751	1,942
Total current assets	89,038	100,924
Property and equipment, net	5,985	6,038
Operating lease right-of-use asset	1,423	1,065
Total assets	$ 96,446	$ 108,027
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	$ 1,511	$ 1,460
Accrued expenses and other current liabilities	2,716	2,349
Operating lease liability, current portion	923	1,006
Total current liabilities	5,150	4,815
Operating lease liability, less current portion	500	59
Long-term debt	29,207	29,149
Total liabilities	34,857	34,023
Commitments and contingencies (Note 10)		
Stockholders' equity:		
Preferred stock, $0.0001 par value - 20,000 shares authorized; none issued and outstanding as of March 31, 2023 and December 31, 2022	—	—
Class A common stock, $0.0001 par value - 800,000 shares authorized; 25,376 and 25,295 issued and outstanding as of March 31, 2023 and December 31, 2022, respectively	3	3
Class B common stock, $0.0001 par value - 40,000 shares authorized; 24,116 issued and outstanding as of March 31, 2023 and December 31, 2022	2	2
Class C common stock, $0.0001 par value - 20,000 shares authorized; none issued and outstanding as of March 31, 2023 and December 31, 2022	—	—
Additional paid-in capital	78,018	75,842
Accumulated other comprehensive loss	(10)	(73)
Accumulated deficit	(47,291)	(38,919)
Total stockholders' equity attributable to Rani Therapeutics Holdings, Inc.	30,722	36,855
Non-controlling interest	30,867	37,149
Total stockholders' equity	61,589	74,004
Total liabilities and stockholders' equity	$ 96,446	$ 108,027

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

RANI THERAPEUTICS HOLDINGS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except per share amounts)
(Unaudited)

	Three Months Ended March 31,	
	2023	2022
Operating expenses		
Research and development	$ 9,712	$ 7,591
General and administrative	6,804	6,189
Total operating expenses	$ 16,516	$ 13,780
Loss from operations	(16,516)	(13,780)
Other income (expense), net		
Interest income and other, net	891	15
Interest expense and other, net	(1,207)	—
Loss before income taxes	(16,832)	(13,765)
Income tax expense	—	(63)
Net loss	$ (16,832)	$ (13,828)
Net loss attributable to non-controlling interest	(8,460)	(7,605)
Net loss attributable to Rani Therapeutics Holdings, Inc.	$ (8,372)	$ (6,223)
Net loss per Class A common share attributable to Rani Therapeutics Holdings, Inc., basic and diluted	$ (0.33)	$ (0.29)
Weighted-average Class A common shares outstanding—basic and diluted	25,240	21,409

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

RANI THERAPEUTICS HOLDINGS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS
(in thousands)
(Unaudited)

	Three Months Ended March 31,	
	2023	2022
Net loss	$ (16,832)	$ (13,828)
Other comprehensive loss		
Net unrealized gain on marketable securities	126	—
Comprehensive loss	$ (16,706)	$ (13,828)
Comprehensive loss attributable to non-controlling interest	(8,397)	(7,605)
Comprehensive loss attributable to Rani Therapeutics Holdings, Inc.	$ (8,309)	$ (6,223)

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

RANI THERAPEUTICS HOLDINGS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY
(in thousands)
(Unaudited)

	Class A Common Stock		Class B Common Stock						
	Shares	Amount	Shares	Amount	Additional Paid In Capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Non-Controlling Interest	Total Stockholders' Equity
Balance at December 31, 2022	25,295	$ 3	24,116	$ 2	$ 75,842	$ (73)	$ (38,919)	$ 37,149	$ 74,004
Issuance of common stock under employee equity plans, net of shares withheld for tax settlement	81	—	—	—	(124)	—	—	—	(124)
Non-controlling interest adjustment for changes in proportionate ownership in Rani LLC	—	—	—	—	98	—	—	(98)	—
Stock-based compensation	—	—	—	—	2,202	—	—	2,213	4,415
Net loss	—	—	—	—	—	—	(8,372)	(8,460)	(16,832)
Other comprehensive loss	—	—	—	—	—	63	—	63	126
Balance at March 31, 2023	25,376	$ 3	24,116	$ 2	$ 78,018	$ (10)	$ (47,291)	$ 30,867	$ 61,589

	Class A Common Stock		Class B Common Stock					
	Shares	Amount	Shares	Amount	Additional Paid In Capital	Accumulated Deficit	Non-Controlling Interest	Total Stockholders' Equity
Balance at December 31, 2021	19,712	$ 2	29,290	$ 3	$ 55,737	$ (8,331)	$ 74,156	$ 121,567
Effect of exchanges of Paired Interests and non-corresponding Class A Units of Rani LLC	4,675	—	(4,517)	—	—	—	—	—
Non-controlling interest adjustment for changes in proportionate ownership in Rani LLC	—	—	—	—	10,928	—	(10,928)	—
Stock-based compensation	—	—	—	—	1,268	—	1,637	2,905
Net loss	—	—	—	—	—	(6,223)	(7,605)	(13,828)
Balance at March 31, 2022	24,387	$ 2	24,773	$ 3	$ 67,933	$ (14,554)	$ 57,260	$ 110,644

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

RANI THERAPEUTICS HOLDINGS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)
(Unaudited)

	Three Months Ended March 31,	
	2023	**2022**
Cash flows from operating activities		
Net loss	$ (16,832)	$ (13,828)
Adjustments to reconcile net loss to net cash used in operating activities:		
Stock-based compensation expense	4,415	2,905
Depreciation and amortization	188	111
Non-cash operating lease expense	260	157
Amortization of debt discount and issuance costs	58	—
Net accretion and amortization of investments in marketable securities	(699)	—
Changes in operating assets and liabilities:		
Prepaid expenses and other current assets	316	721
Accounts payable	76	78
Accrued expenses and other current liabilities	323	653
Operating lease liabilities	(259)	(157)
Net cash used in operating activities	(12,154)	(9,360)
Cash flows from investing activities		
Purchases of marketable securities	(18,629)	—
Proceeds from maturities of marketable securities	23,000	—
Purchases of property and equipment	(248)	(254)
Net cash provided by (used in) investing activities	4,123	(254)
Cash flows from financing activities		
Proceeds from employee stock purchase plan	132	—
Tax withholdings paid on behalf of employees for net share settlement	(124)	—
Net cash provided by financing activities	8	—
Net decrease in cash, cash equivalents and restricted cash equivalents	(8,023)	(9,614)
Cash, cash equivalents and restricted cash equivalents, beginning of period	27,507	117,453
Cash, cash equivalents and restricted cash equivalents, end of period	$ 19,484	$ 107,839
Supplemental disclosures of non-cash investing and financing activities		
Property and equipment purchases included in accounts payable and accrued expenses and other current liabilities	$ 85	$ 135
Right-of-use assets obtained in exchange for new operating lease liabilities	$ 578	$ —
Interest income receivable included in prepaid expenses	$ 125	$ —
Exchanges of Paired Interests and non-corresponding Class A Units of Rani LLC	$ —	$ 73,160

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

1. Organization and Nature of Business

Description of Business

Rani Therapeutics Holdings, Inc. (“Rani Holdings”) was formed as a Delaware corporation in April 2021 for the purpose of facilitating an initial public offering (“IPO”) of its Class A common stock, and to facilitate certain organizational transactions and to operate the business of Rani Therapeutics, LLC (“Rani LLC”) and its consolidated subsidiary, Rani Management Services, Inc. (“RMS”). Rani Holdings and its consolidated subsidiaries, Rani LLC and RMS (prior to December 15, 2022), are collectively referred to herein as “Rani” or the “Company.” RMS was dissolved on December 15, 2022.

The Company is a clinical stage biotherapeutics company focusing on advancing technologies to enable the administration of biologics and drugs orally, to provide patients, physicians, and healthcare systems with a convenient alternative to painful injections. The Company is advancing a portfolio of oral therapeutics using its proprietary delivery technology, the RaniPill capsule. The Company is headquartered in San Jose, California and operates in one segment.

Organizational Transactions

In connection with the IPO, the Company was party to the following organizational transactions (the “Organizational Transactions”):

- Amended and restated Rani LLC’s operating agreement (the “Rani LLC Agreement”) to appoint the Company as the sole managing member of Rani LLC and effectuated an exchange of all outstanding (i) convertible preferred units, automatic or net exercised warrants to purchase preferred units and common units, and common units of Rani LLC, into economic nonvoting Class A units (“Class A Units”) and an equal number of voting noneconomic Class B units (“Class B Units”) and (ii) all non-vested incentive units (“Profits Interests”) into Class A Units. In connection with the closing of the IPO, each LLC interest was exchanged 1 for 0.5282 as determined and predicated on the initial public offering price of the Company’s Class A common stock;
- Amended and restated the Company’s certificate of incorporation in July 2021, to provide for the issuance of (i) Class A common stock, each share of which entitles its holders to one vote per share, (ii) Class B common stock, each share of which entitles its holders to 10 votes per share on all matters presented to the Company's stockholders, (iii) Class C common stock, which has no voting rights, except as otherwise required by law and (iv) preferred stock;
- Exchanged 12,047,925 shares of Class A common stock for existing Class A Units of Rani LLC held by certain individuals and entities (the “Former LLC Owners”) on a one-for-one basis;
- Issued 29,290,391 shares of Class B common stock to certain individuals and entities that continued to hold Class A Units in Rani LLC after the IPO (the “Continuing LLC Owners”) in return for an equal amount of Rani LLC Class B Units;
- Entered into a Registration Rights Agreement with certain of the Continuing LLC Owners.

The Continuing LLC Owners are entitled to exchange, subject to the terms of the Rani LLC Agreement, the Class A Units they hold in Rani LLC, together with the shares they hold of the Company Class B common stock (together referred to as a "Paired Interest"), in return for shares of the Company’s Class A common stock on a one-for-one basis provided that, at the Company’s election, the Company has the ability to effect a direct exchange of such Class A common stock or make a cash payment equal to a volume weighted average market price of one share of Class A common stock for each Paired Interest redeemed. Any shares of Class B common stock will be cancelled on a one-for-one basis if, at the election of the Continuing LLC Owners, the Company redeems or exchanges such Paired Interest pursuant to the terms of the Rani LLC Agreement. As of March 31, 2023, certain individuals who continue to own interests in Rani LLC but do not hold shares of the Company’s Class B common stock (“non-corresponding Class A Units”) have the ability to exchange their non-corresponding Class A Units of Rani LLC for 1,387,471 shares of the Company’s Class A common stock.

Liquidity

The Company has incurred recurring losses since its inception, including net losses of $16.8 million for the three months ended March 31, 2023. As of March 31, 2023, the Company had an accumulated deficit of $47.3 million and for the three months ended March 31, 2023 had negative cash flows from operations of $12.2 million. The Company expects to continue to generate operating losses and negative operating cash flows for the foreseeable future as it continues to develop the RaniPill capsule. The

Company expects that its cash, cash equivalents and marketable securities of $86.8 million as of March 31, 2023 will be sufficient to fund its operations through at least twelve months from the date the condensed consolidated financial statements are issued. The Company expects to finance its future operations with its existing cash and through strategic financing opportunities that could include, but are not limited to, future offerings of its equity, such as “at the market offerings ” as defined in Rule 415(a)(4) under the Securities Act, collaboration or licensing agreements, or the incurrence of debt. However, there is no guarantee that any of these strategic or financing opportunities will be executed or realized on favorable terms, if at all, and some could be dilutive to existing stockholders and holders of interests in the Company. The Company will not generate any revenue from product sales unless, and until, it successfully completes clinical development and obtains regulatory approval of its product candidates. If the Company obtains regulatory approval for the RaniPill capsule, it expects to incur significant expenses related to developing its internal commercialization capability to support manufacturing, product sales, marketing, and distribution.

The Company’s ability to raise additional capital through either the issuance of equity or debt, is dependent on a number of factors including, but not limited to, the market interest of the Company, which itself is subject to a number of development and business risks and uncertainties, as well as the uncertainty that the Company would be able to raise such additional capital at a price or on terms that are favorable to the Company. Current global economic conditions or other factors could also adversely impact the Company’s ability to access capital when and as needed.

2. Summary of Significant Accounting Policies

Basis of Presentation

These condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America (“U.S. GAAP”).

The Company operates and controls all of the business and affairs of Rani LLC and, through Rani LLC conducts its business. Because the Company manages and operates the business and controls the strategic decisions and day-to-day operations of Rani LLC and also has a substantial financial interest in Rani LLC, the Company consolidates the financial results of Rani LLC, and a portion of its net loss is allocated to the non-controlling interests in Rani LLC held by the Continuing LLC Owners. All intercompany accounts and transactions have been eliminated in consolidation.

Unaudited Interim Condensed Consolidated Financial Statements

The accompanying condensed consolidated financial statements have been prepared in accordance with U.S. GAAP for interim financial information and pursuant to Form 10-Q of Regulation S-X of the Securities and Exchange Commission (“SEC”). Accordingly, they do not include all of the information and footnotes required by U.S. GAAP for complete financial statements. These unaudited condensed consolidated financial statements include all adjustments necessary to fairly state the financial position and the results of the Company's operations and cash flows for interim periods in accordance with U.S. GAAP. All such adjustments are of a normal, recurring nature. Operating results for the three months ended March 31, 2023 are not necessarily indicative of the results that may be expected for the year ending December 31, 2023 or for any future period.

The consolidated balance sheet as of December 31, 2022 included herein was derived from the audited consolidated financial statements as of that date. Certain information and footnote disclosures normally included in annual financial statements prepared in accordance with U.S. GAAP have been condensed or omitted. Therefore, these interim condensed consolidated financial statements should be read in conjunction with the 2022 consolidated financial statements and notes included in the Company’s Annual Report on Form 10-K filed with the SEC on March 22, 2023.

Use of Estimates

The preparation of the condensed consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue and expenses and the disclosure of contingent assets and liabilities in the Company’s condensed consolidated financial statements and accompanying notes. The Company evaluates its estimates on an ongoing basis. The Company bases its estimates on its historical experience and also on assumptions that we believe are reasonable; however, actual results may differ materially and adversely from these estimates.

Significant Accounting Policies

A description of the Company's significant accounting policies is included in the audited consolidated financial statements within its Annual Report on Form 10-K for the year ended December 31, 2022. Except as noted below, there have been no material changes in the Company's significant accounting policies during the three months ended March 31, 2023.

Concentrations of Credit Risk and Other Risks and Uncertainties

Financial instruments that potentially subject the Company to concentrations of credit risk consist primarily of cash and cash equivalents. The Company maintains accounts in federally insured financial institutions in excess of federally insured limits. The Company also holds money market funds that are not federally insured. However, management believes the Company is not exposed to significant credit risk due to the financial strength of the depository institutions in which these deposits are held and of the money market funds and other entities in which these investments are made.

Cash, Cash Equivalents and Restricted Cash Equivalents

The following table provides a reconciliation of cash, cash equivalents and restricted cash equivalents reported within the condensed consolidated balance sheet which, in aggregate, represents the amount reported in the condensed consolidated statements of cash flows for the three months ended March 31, 2023 and 2022:

	Three Months Ended March 31,	
	2023	2022
End of Period:		
Cash and cash equivalents	$ 18,984	$ 107,839
Restricted cash equivalents	500	—
Total cash, cash equivalents and restricted cash equivalents	$ 19,484	$ 107,839

Marketable Securities

The Company regularly reviews its investments for declines in fair value below their amortized cost basis to determine whether the impairment is due to credit-related factors or noncredit-related factors. The Company's review includes the creditworthiness of the security issuers, the severity of the unrealized losses, 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 its amortized cost bases. When the Company determines that a portion of the unrealized loss is due to an expected credit loss, the Company recognizes the loss amount in Other income (expense), net, with a corresponding allowance against the carrying value of the security the Company holds. The portion of the unrealized loss related to factors other than credit losses is recognized in Accumulated other comprehensive loss. The Company has made an accounting policy election to not measure an allowance for credit loss for accrued interest receivables and will recognize a credit loss for accrued interest receivables when the loss becomes probable and estimable. As of March 31, 2023, interest income receivable recorded as a component of prepaid expenses and other current assets on the condensed consolidated balance sheet totaled $0.1 million.

Fair Value of Financial Instruments

Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value must maximize the use of observable inputs and minimize the use of unobservable inputs. Financial assets and liabilities carried at fair value are to be 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—Quoted prices in active markets for identical assets or liabilities.

Level 2—Observable inputs (other than Level 1 quoted prices), such as quoted prices in active markets for similar assets or liabilities, quoted prices in markets that are not active for identical or similar assets or liabilities, or other inputs that are observable or can be corroborated by observable market data.

Level 3—Unobservable inputs that are supported by little or no market activity and that are significant to determining the fair value of the assets or liabilities, including pricing models, discounted cash flow methodologies and similar techniques.

As of March 31, 2023 and 2022, the carrying values of current assets and liabilities approximates fair value due to their short-term nature, respectively. The fair value of the Company's long-term debt approximated its carrying value based on borrowing rates currently available to the Company for debt with similar terms and maturities (Level 2 inputs).

To the extent that the valuation is based on models or inputs that are less observable or unobservable in the market, the determination of fair value requires more judgment. Accordingly, the degree of judgement exercised by the Company in determining fair value is greatest for instruments categorized in Level 3. A financial instrument's level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value of the instrument.

Tax Receivable Agreement

In August 2021, in connection with the IPO and Organizational Transactions, the Company entered into a tax receivable agreement ("TRA") with certain of the Continuing LLC Owners. The TRA provides that the Company pay to such Continuing LLC Owners, 85% of the amount of tax benefits, if any, it is deemed to realize (calculated using certain assumptions) as a result of (i) increases in the tax basis of assets of Rani LLC resulting from (a) any future redemptions or exchanges of Paired Interests or non-corresponding Class A Units of Rani LLC and (b) payments under the TRA and (ii) certain other benefits arising from payments under the TRA (collectively the "Tax Attributes").

A liability for the payable to parties subject to the TRA, and a reduction to stockholders' equity, is accrued when (i) an exchange of a Paired Interest or non-corresponding Class A Units of Rani LLC has occurred and (ii) when it is deemed probable that the Tax Attributes associated with the exchange will be used to reduce the Company's taxable income based on the contractual percentage of the benefit of Tax Attributes that the Company expects to receive over a period of time (Note 12).

Comprehensive Loss

Comprehensive loss is defined as a change in equity of a business enterprise during a period, resulting from transactions and other events and/or circumstances from non-owner sources. Other comprehensive loss represents changes in fair value of the Company's available-for-sale marketable securities.

Net Loss Per Class A Common Share Attributable to Rani Holdings

Basic net loss per Class A common share attributable to Rani Holdings is computed by dividing net loss attributable to the Company by the weighted average number of Class A common shares outstanding during the period, without consideration of potential dilutive securities. Diluted net loss per Class A common share is computed giving effect to all potentially dilutive shares. Diluted net loss per Class A common share for all periods presented is the same as basic loss per share as the inclusion of potentially issuable shares would be antidilutive.

Non-Controlling Interest

Non-controlling interest ("NCI") represents the portion of income or loss, net assets and comprehensive loss of the Company's consolidated subsidiary that is not allocable to Rani Holdings based on the Company's percentage of ownership of Rani LLC.

In August 2021, based on the Organizational Transactions, Rani Holdings became the sole managing member of Rani LLC. As of March 31, 2023, Rani Holdings held approximately 50% of the Class A Units of Rani LLC, and approximately 50% of the outstanding Class A Units of Rani LLC are held by the Continuing LLC Owners. Therefore, the Company reports NCI based on the Class A Units of Rani LLC held by the Continuing LLC Owners on its condensed consolidated balance sheet as of March 31, 2023. Income or loss attributed to the NCI in Rani LLC is based on the Class A Units outstanding during the period for which the income or loss is generated and is presented on the condensed consolidated statements of operations and comprehensive loss.

Future exchanges of Paired Interests and non-corresponding Class A Units of Rani LLC will result in a change in ownership and reduce or increase the amount recorded as NCI and increase or decrease additional paid-in-capital when Rani LLC has positive or negative net assets, respectively. From the date of the Organizational Transactions to March 31, 2023, there were 5,173,947 exchanges of Paired Interests and 158,051 exchanges of non-corresponding Class A Units of Rani LLC for an equal number of shares of the Company's Class A common stock.

3. Cash Equivalents, Restricted Cash Equivalents and Marketable Securities

The following tables summarizes the amortized cost and fair value of the Company's cash equivalents, restricted cash equivalents and marketable securities by major investment category (in thousands):

	As of March 31, 2023			
	Amortized Cost	Unrealized Gains	Unrealized Losses	Estimated Fair Value
Current assets:				
Cash equivalents:				
Money market funds	$ 15,459	$ —	$ —	$ 15,459
Total cash equivalents	15,459	—	—	15,459
Restricted cash equivalents:				
Money market funds	500	—	—	500
Total cash equivalents and restricted cash equivalents	15,959	—	—	15,959
Marketable securities:				
U.S. Treasuries and agencies	41,511	—	(12)	41,499
Commercial paper	19,353	—	—	19,353
Corporate debt securities	6,962	—	(11)	6,951
Total marketable securities	67,826	—	(23)	67,803
Total cash equivalents, restricted cash equivalents and marketable securities	$ 83,785	$ —	$ (23)	$ 83,762

	As of December 31, 2022			
	Amortized Cost	Unrealized Gains	Unrealized Losses	Estimated Fair Value
Current assets:				
Cash equivalents:				
Money market funds	$ 25,313	$ —	$ —	$ 25,313
Total cash equivalents	25,313	—	—	25,313
Restricted cash equivalents:				
Money market funds	500	—	—	500
Total cash equivalents and restricted cash equivalents	25,813	—	—	25,813
Marketable securities:				
U.S. Treasuries and agencies	36,563	—	(107)	36,456
Commercial paper	26,631	—	—	26,631
Corporate debt securities	6,939	—	(39)	6,900
International government	1,491	—	(3)	1,488
Total marketable securities	71,624	—	(149)	71,475
Total cash equivalents, restricted cash equivalents and marketable securities	$ 97,437	$ —	$ (149)	$ 97,288

As of March 31, 2023, all marketable securities held have maturity dates within one year or less. The Company regularly reviews its available-for-sale marketable securities in an unrealized loss position and evaluates the current expected credit loss by considering factors such as historical experience, market data, issuer-specific factors, and current economic conditions. As of March 31, 2023, the aggregate difference between the amortized cost and fair value of each security in an unrealized loss position was de minimis. Since any provision for expected credit losses for a security held is limited to the amount the fair value is less than its amortized cost, no allowance for expected credit loss was deemed necessary at March 31, 2023.

4. Fair Value Measurements

The following tables presents information about the Company's financial assets and liabilities measured at fair value on a recurring basis and indicates the level of inputs used in such measurements (in thousands):

	As of March 31, 2023			
	Level 1	Level 2	Level 3	Total
Assets:				
Cash equivalents:				
Money market funds	$ 15,459	$ —	$ —	$ 15,459
Restricted cash equivalents:				
Money market funds	500	—	—	500
Marketable securities				
U.S. Treasuries and agencies	41,499	—	—	41,499
Commercial paper	—	19,353	—	19,353
Corporate debt securities	—	6,951	—	6,951
Total assets	$ 57,458	$ 26,304	$ —	$ 83,762

	As of December 31, 2022			
	Level 1	Level 2	Level 3	Total
Assets:				
Cash equivalents:				
Money market funds	$ 25,313	$ —	$ —	$ 25,313
Restricted cash equivalents:				
Money market funds	500	—	—	500
Marketable securities				
U.S. Treasuries and agencies	36,456	—	—	36,456
Commercial paper	—	26,631	—	26,631
Corporate debt securities	—	6,900	—	6,900
International government	—	1,488	—	1,488
Total assets	$ 62,269	$ 35,019	$ —	$ 97,288

Level 1 and Level 2 financial instruments are comprised of investments in money market funds and fixed-income securities. The Company estimates the fair value of its Level 2 financial instruments by taking into consideration valuations obtained from third-party pricing services. The third-party pricing services utilize industry standard valuation models, for which all significant inputs are observable, either directly or indirectly, to estimate fair value. These inputs include reported trades of and broker/dealer quotes on the same or similar securities; issuer credit spreads; benchmark securities; and other observable inputs.

There were no transfers between Level 1, Level 2 and Level 3 of the fair value hierarchy for any of the periods presented.

5. Accrued Expenses and Other Current Liabilities

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

	March 31, 2023	December 31, 2022
Payroll and related	$ 1,558	$ 394
Accrued preclinical and clinical trial costs	427	1,130
Accrued interest	177	69
Accrued professional fees	155	165
Related party payable	39	53
Other	360	538
Total accrued expenses and other current liabilities	$ 2,716	$ 2,349

6. Related Party Transactions

InCube Labs, LLC ("ICL") is wholly-owned by the Company's founder and Chairman and his family. The founder and Chairman is the father of the Company's Chief Executive Officer. The Company's Chief Scientific Officer is also the brother of the founder and Chairman and thus uncle of the Company's Chief Executive Officer.

Services agreements

In June 2021, Rani LLC entered into a service agreement with ICL effective retrospectively to January 1, 2021, and subsequently amended such agreement in March 2022 (as amended, the "Rani LLC-ICL Service Agreement"), pursuant to which Rani LLC and ICL agreed to provide personnel services to the other upon requests. Under the amendment in March 2022, Rani LLC has a right to occupy certain facilities leased by ICL in Milpitas, California and San Antonio, Texas ("Occupancy Services") for general office, research and development, and light manufacturing. The Rani LLC-ICL Service Agreement has a twelve-month term and will automatically renew for a successive twelve-month periods unless terminated; except that the Occupancy Services in Milpitas, California have a term until February 2024, following an extension granted in July 2022, with the potential for one additional annual renewal, subject to approval by the landlord upon a nine months' notice of renewal prior to the end of the lease term, and the Occupancy Services in San Antonio, Texas continue until either party gives six months' notice of termination. Except for the Occupancy Services, Rani LLC or ICL may terminate services under the Rani LLC-ICL Service Agreement upon 60 days' notice to the other party. The Rani LLC-ICL Service Agreement specifies the scope of services to be provided as well as the methods for determining the costs of services. Costs are billed or charged on a monthly basis by ICL or Rani LLC, respectively.

In June 2021, RMS entered into a service agreement with ICL (the "RMS-ICL Service Agreement") effective retrospectively to January 1, 2021, pursuant to which ICL agreed to rent a specified portion of its facility in San Jose, California to RMS. Additionally, RMS and ICL agreed to provide personnel services to the other upon requests based on rates specified in the RMS-ICL Service Agreement. In April 2022, RMS assigned the RMS-ICL Service Agreement to Rani LLC. The RMS-ICL Service Agreement has a twelve-month term and will automatically renew for successive twelve-month periods unless terminated. Rani LLC or ICL may terminate services under the RMS-ICL Service Agreement upon 60 days' notice to the other party, except for occupancy which requires six months' notice. The RMS-ICL Service Agreement specifies the scope of services to be provided as well as the methods for determining the costs of services. Costs are billed or charged on a monthly basis by ICL or Rani LLC, respectively, as well as allocations of expenses based upon Rani LLC's utilization of ICL's facilities and equipment.

The table below details the amounts charged by ICL for services and rent, net of the amount that the Company charged ICL, which is included in the condensed consolidated statements of operations (in thousands):

	Three Months Ended March 31,	
	2023	2022
Research and development	$ 310	$ 239
General and administrative	72	63
Total	$ 382	$ 302

Prior to April 2022, the Company's eligible employees were permitted to participate in ICL's 401(k) Plan ("401(k) Plan"). Participation in the 401(k) Plan was offered for the benefit of the employees, including the Company's named executive officers, who satisfied certain eligibility requirements. In April 2022, the Company established its own 401(k) Plan, with participation offered for the benefit of the employees, including the Company's named executive officers, who satisfy certain eligibility requirements.

As of March 31, 2023, all of the Company's facilities are owned or leased by an entity affiliated with the Company's Chairman (Note 7). The Company pays for the use of these facilities through its services agreements with ICL.

Exclusive License, Intellectual Property and Common Unit Purchase Agreement

In June 2021, ICL and the Company, through Rani LLC, entered into an Amended and Restated Exclusive License Agreement which replaced the 2012 Exclusive License Agreement between ICL and Rani LLC, as amended in 2013, and terminated the 2012 Intellectual Property Agreement between ICL and Rani LLC, as amended in June 2013. Under the Amended and Restated Exclusive License Agreement, the Company has a fully paid, exclusive license under certain scheduled patents related to optional features of the device and certain other scheduled patents to exploit products covered by those patents in the field of oral delivery of sensors, small molecule drugs or biologic drugs including, any peptide, antibody, protein, cell therapy, gene therapy or vaccine. The Company covers patent-related expenses and, after a certain period, the Company will have the right to acquire four specified United States patent families from ICL by making a one-time payment of $0.3 million to ICL for each United States patent family that the Company desires to acquire, up to $1.0 million in the aggregate. This payment will not become an obligation until the fifth anniversary of the Amended and Restated Exclusive License Agreement. The Amended and Restated Exclusive License Agreement will terminate when there are no remaining valid claims of the patents licensed under the Amended and Restated Exclusive License Agreement. Additionally, the Company may terminate the Amended and Restated Exclusive License Agreement in its entirety or as to any particular licensed patent upon notification to ICL of such intent to terminate.

Non-Exclusive License Agreement between Rani and ICL ("Non-Exclusive License Agreement")

In June 2021, the Company, through Rani LLC, entered into the Non-Exclusive License Agreement with ICL a related party, pursuant to which the Company granted ICL a non-exclusive, fully-paid license under specified patents that were assigned from ICL to the Company. Additionally, the Company agreed not to license these patents to a third party in a specific field outside the field of oral delivery of sensors, small molecule drugs or biologic drugs including, any peptide, antibody, protein, cell therapy, gene therapy or vaccine, if ICL can prove that it or its sublicensee has been in active development of a product covered by such patents in that specific field. ICL may grant sublicenses under this license to third parties only with the Company's prior approval. The Non-Exclusive License Agreement will continue in perpetuity unless earlier terminated.

Intellectual Property Agreement with Mir Imran (the "Mir Agreement")

In June 2021, the Company, through Rani LLC, entered into the Mir Agreement, pursuant to which the Company and Mir Imran agreed that the Company would own all intellectual property conceived (i) using any of the Company's people, equipment, or facilities or (ii) that is within the field of oral delivery of sensors, small molecule drugs or biologic drugs including, any peptide, antibody, protein, cell therapy, gene therapy or vaccine. Neither the Company nor Mir Imran may assign the Mir Agreement to any third party without the prior written consent of the other party. The initial term of the Mir Agreement is three years, which can be extended upon mutual consent of the parties. The Mir Agreement may be terminated by either party for any reason within the initial three-year term upon providing three months' notice to the other party.

Tax Receivable Agreement

Certain parties to the TRA, entered into in August 2021 pursuant to the IPO and Organizational Transactions are related parties of the Company. The TRA provides that the Company pay to such entities and individuals 85% of the amount of tax benefits, if any, it is deemed to realize from exchanges of Paired Interests (Note 2). During the three months ended March 31, 2023 and 2022, these parties to the TRA exchanged zero and 2,309,490 Paired Interests, respectively, that resulted in tax benefits subject to the TRA (Note 12).

Registration Rights Agreement

In connection with the IPO, the Company entered into a Registration Rights Agreement. ICL and its affiliates are parties to this agreement. The Registration Rights Agreement provides certain registration rights whereby, at any time following the IPO and the expiration of any related lock-up period, ICL and its affiliates can require the Company to register under the Securities Act of 1933, as amended (the "Securities Act") shares of Class A common stock issuable to ICL and its affiliates upon, at the Company's election, redemption or exchange of their Paired Interests. The Registration Rights Agreement also provides for piggyback registration rights. In March 2022, certain holders of the Company's Class A common stock considered to be related parties were made parties to the Registration Rights Agreement. As a result of certain stockholders exercising their registration rights under the Registration Rights Agreement, in December 2022, the Company filed a registration statement on Form S-3 to register 6,009,542 shares of Class A common stock of the Company held by certain of its stockholders.

Rani LLC Agreement

The Company operates its business through Rani LLC. In connection with the IPO, the Company and the Continuing LLC Owners, including ICL and its affiliates, entered into the Rani LLC Agreement. The governance of Rani LLC, and the rights and obligations of the holders of LLC Interests, are set forth in the Rani LLC Agreement. As Continuing LLC Owners, ICL and its affiliates are entitled to exchange, subject to the terms of the Rani LLC Agreement, Paired Interests for Class A common stock of the Company; provided that, at the Company's election, the Company may effect a direct exchange of such Class A common stock or make a cash payment equal to a volume weighted average market price of one share of Class A common stock for each Paired Interest redeemed.

During the three months ended March 31, 2023 and 2022, certain parties to the Rani LLC Agreement exchanged zero and 2,309,490 Paired Interests, respectively, for an equal number of shares of the Company's Class A common stock.

7. Leases

The Company pays for the use of its office, laboratory and manufacturing facility in San Jose, California as part of the RMS-ICL Service Agreement. In April 2022, RMS assigned the RMS-ICL Service Agreement to Rani LLC. The RMS-ICL Service Agreement has a twelve-month term and will automatically renew for successive twelve-month periods unless Rani LLC or ICL

terminate occupancy under the RMS-ICL Service Agreement upon six months' notice. In January 2023, the Company determined it to be reasonably certain that it would exercise its renewal option for a successive twelve-month period through 2024. The Company accounted for the renewal option as a lease modification that did not result in a separate contract and recognized the additional right-of-use asset and corresponding lease liabilities associated with the Rani LLC-ICL Service Agreement in its condensed consolidated balance sheet as of March 31, 2023.

Under the Rani LLC-ICL Service Agreement amended in March 2022, Rani LLC has a right to occupy certain facilities leased by ICL in Milpitas, California and San Antonio, Texas for general office, research and development, and light manufacturing. The Rani LLC-ICL Service Agreement has a twelve-month term and will automatically renew for successive twelve-month periods unless terminated; except that the Occupancy Services in Milpitas, California have a term until February 2024, following an extension granted in July 2022, with the potential for one additional annual renewal, subject to approval by the landlord upon a nine months' notice of renewal prior to the end of the lease term, and the Occupancy Services in San Antonio, Texas continue until either party gives six months' notice of termination. In July 2022, the Company accounted for the lease extension as a lease modification that did not result in a separate contract and recognized the right-of-use asset and lease liabilities associated with the Rani LLC-ICL Service Agreement in its condensed consolidated balance sheet. As of March 31, 2023, the second renewal option for the facility in Milpitas, California was not deemed reasonably certain to be exercised.

The Company's leases are accounted for as operating leases and require certain fixed payments of real estate taxes and insurance in addition to future minimum lease payments, and certain variable payments of common area maintenance costs and building utilities. Variable lease payments are expensed in the period in which the obligation for those payments is incurred. These variable lease costs are payments that vary in amount beyond the commencement date, for reasons other than passage of time. Short-term lease expense for Occupancy Services in San Antonio, Texas under the Rani LLC-ICL Service Agreement, and variable lease payments are excluded in the total operating lease expense and immaterial for the periods presented.

The weighted average remaining lease term and weighted average discount rate related to the Company's right-of-use assets and operating lease liabilities for its operating leases were as follows:

	March 31,	
	2023	2022
Weighted-average remaining lease term	1.6 years	1.8 years
Weighted-average discount rate	10.4%	5.0%

As of March 31, 2023, the Company expects that its future minimum operating lease payments will become due and payable as follows (in thousands):

Year ending December 31,	
2023 (remaining nine months)	$ 785
2024	749
Total undiscounted future minimum lease payments	$ 1,534
Less: Imputed interest	(111)
Total operating lease liability	$ 1,423
Less: Operating lease liability, current portion	923
Operating lease liability, less current portion	$ 500

8. Warrants

In August 2022, in conjunction with a loan and security agreement (Note 11), the Company issued warrants to purchase 76,336 shares of the Company's Class A common stock. The warrants are exercisable for a period of five years from the grant date, as may be adjusted for certain anti-dilution adjustments, dividends, stock splits, and reverse stock splits, at an exercise price per share equal to $11.79, which may be net share settled at the option of the holder. As of March 31, 2023, there were 76,336 warrants outstanding.

The warrants were determined to be equity classified Level 3 securities with a fair value totaling $0.5 million, estimated on the date of issuance using the Black-Scholes valuation model which requires inputs based on certain subjective assumptions, including the expected stock price volatility, the expected term of the option, the risk-free interest rate for a period that approximates the expected term of the option, and the Company's expected dividend yield. Such assumptions represent management's best estimates and involve inherent uncertainties and the application of management's judgment.

9. Stockholders' Equity

For the three months ended March 31, 2023 and 2022, certain of the Continuing LLC Owners executed an exchange of zero and 4,517,105 Paired Interests, respectively, and zero and 158,051 non-corresponding Class A Units of Rani LLC, respectively, in return for an equal number of shares of the Company's Class A common stock. The corresponding shares of the Company's Class B common stock included in the exchange of Paired Interests were subsequently cancelled and retired pursuant to the terms of the Rani LLC Agreement.

In August 2022, the Company entered into a Controlled Equity Sales Agreement (the "Sales Agreement") with Cantor Fitzgerald & Co. and H.C. Wainwright & Co., LLC (collectively the "Agents"), pursuant to which the Company may offer and sell from time to time through the Agents up to $150 million of shares of its Class A common stock, in such share amounts as the Company may specify by notice to the Agents, in accordance with the terms and conditions set forth in the Sales Agreement. The potential proceeds from the Sales Agreement are expected to be used for general corporate purposes. As of March 31, 2023, the Company has no sales under the Sales Agreement. In connection with the Sales Agreement, the Company recognized deferred offering costs totaling $0.3 million as a component of prepaid expenses and other current assets in the condensed consolidated balance sheet as of March 31, 2023 which will be offset against proceeds upon a sale under the Sales Agreement within the condensed consolidated statement of changes in stockholders' equity.

10. Commitments and Contingencies

Legal Proceedings

In the ordinary course of business, the Company may be subject to legal proceedings, claims and litigation as the Company operates in an industry susceptible to patent legal claims. The Company accounts for estimated losses with respect to legal proceedings and claims when such losses are probable and estimable. Legal costs associated with these matters are expensed when incurred. The Company is currently involved in several opposition proceedings at the European Patent Office, all of which were asserted against us by Novo Nordisk AS. The ultimate outcome of this matter as a loss is not probable nor is there any amount that is reasonably estimable. However, the outcome of the opposition proceedings could impact the Company's ability to prevent third parties from commercializing in Europe products with characteristics similar to those of the Company's RaniPill technology.

Tax Receivable Agreement

The Company is party to a TRA with certain of the Continuing LLC Owners (Note 2). As of March 31, 2023, the Company has not recorded a liability under the TRA related to the income tax benefits originating from the exchanges of Paired Interest or non-corresponding Class A Units of Rani LLC as it is not probable that the Company will realize such tax benefits. To the extent the Company is able to realize the income tax benefits associated with the exchanges of Paired Interest or non-corresponding Class A Units of Rani LLC subject to the TRA, the TRA payable would range from zero to $22.9 million at March 31, 2023.

The amounts payable under the TRA will vary depending upon a number of factors, including the amount, character, and timing of the taxable income of the Company in the future. Should the Company determine that the payment of the TRA liability becomes probable at a future date based on new information, any changes will be recorded on the Company's condensed consolidated statement of operations and comprehensive loss at that time.

11. Long-Term Debt

In August 2022, the Company entered into a loan and security agreement and related supplement (the "Loan Agreement") with Avenue Venture Opportunities Fund, L.P (the "Lender"). The Loan Agreement provides for term loans (the "Loans") in an aggregate principal amount up to $45.0 million. A Loan of $30.0 million was committed at closing, with $15.0 million funded immediately and $15.0 million available to be drawn between October 1, 2022 and December 31, 2022, which was drawn in December 2022. The remaining $15.0 million of Loans ("Tranche 2") is uncommitted and is subject to certain conditions and approval by the Lender. The purpose of the Loans is for general corporate purposes. In exchange for access to this facility, the Company agreed to issue warrants exercisable into 76,336 shares of the Company's Class A common stock, as may be adjusted for certain anti-dilution adjustments, dividends, stock splits, and reverse stock splits, at an exercise price per share equal to $11.79 (Note 8).

Pursuant to the Loan Agreement, the maturity date for the Loans is August 1, 2026 (the "Maturity Date"). The Loan principal is repayable in equal monthly installments beginning September 2024 extendable to March 2025 under certain conditions. The Loans bear interest at a variable rate per annum equal to the greater of (A) the prime rate, as published by the Wall Street Journal from time to time plus 5.60% or (B) 10.35%. The Loan Agreement is collateralized by substantially all of the Company's assets, in

which the Lender is granted continuing security interests. The Loans includes customary events of default, including instances of a material adverse change in the Company's operations, which may require prepayment of the outstanding Loans. At March 31, 2023, the effective interest rate on the Loans was 14.78% and there were no events of default during the three months ended March 31, 2023. The Company is also subject to certain covenants. As of March 31, 2023, the Company was in compliance with all applicable covenants under the Loan Agreement.

As of March 31, 2023, future principal payments for the Company's debt are as follows (in thousands):

Year ending December 31,	
2023 (remaining nine months)	$ —
2024	5,000
2025	15,000
2026	10,000
Total principal payments	$ 30,000
Less: amount representing debt discount	(793)
Total long-term debt	$ 29,207

12. Income Taxes

The Company's effective income tax rate was zero and (0.10)% for the three months ended March 31, 2023 and 2022, respectively. As a result of the exchanges from the date of the Organizational Transactions to March 31, 2023, the Company recorded a $18.7 million deferred tax asset related to income tax benefit associated with the basis of the net assets of Rani LLC. Because of the Company's history of operating losses, the Company believes that recognition of the deferred tax assets arising from such future income tax benefits is currently not more-likely-than-not to be realized and, accordingly, has recognized a full valuation allowance on its deferred tax assets.

There were no material changes to uncertain tax positions for the three months ended March 31, 2023 and 2022, and the Company does not anticipate material changes within the next twelve months.

13. Net Loss Per Share

The following table sets forth the computation of basic and diluted net loss per Class A common share attributable to Rani Holdings (in thousands, except per share data):

	Three Months Ended March 31,	
	2023	2022
Numerator:		
Net loss per Class A common share attributable to Rani Therapeutics Holdings, Inc.	$ (8,372)	$ (6,223)
Denominator:		
Weighted average Class A common share outstanding—basic and diluted	25,240	21,409
Net loss per Class A common share attributable to Rani Therapeutics Holdings, Inc. —basic and diluted	$ (0.33)	$ (0.29)

The following table shows the total outstanding securities considered anti-dilutive and therefore excluded from the computation of diluted net loss per Class A common share attributable to Rani Holdings (in thousands):

	Three Months Ended March 31,	
	2023	2022
Paired Interests	24,116	24,773
Stock options	5,709	3,376
Restricted stock units	1,855	997
Non-corresponding Class A Units	1,387	1,387
Warrants	76	—
Shares issuable pursuant to the ESPP	66	—
Restricted stock awards	59	96
	33,268	30,629

Shares of Class B Common Stock do not share in the Company’s earnings and are not participating securities. Accordingly, separate presentation of loss per share of Class B Common Stock under the two-class method has not been provided. The outstanding shares of Class B Common Stock were determined to be anti-dilutive for the three months ended March 31, 2023. Therefore, they are not included in the computation of net loss per Class A common share attributable to Rani Holdings.

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

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read the following management's discussion and analysis of our financial condition and results of operations together with our unaudited condensed consolidated financial statements and the related notes and other information included elsewhere in this Quarterly Report on Form 10-Q and the audited consolidated financial statements and notes thereto included in our Annual Report on Form 10-K for the year ended December 31, 2022, as filed with the Securities and Exchange Commission ("SEC"). Some of the information contained in this discussion and analysis or set forth elsewhere in this document, includes forward looking statements that involve risks, uncertainties, and assumptions. Our actual results could differ materially from those discussed in or implied by these forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those discussed in the section titled "Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2022. Please also see the section titled "Forward Looking Statements."

The following discussion contains references to calendar year 2022 and the three months ended March 31, 2023 and 2022, respectively, which represents the condensed consolidated financial results of Rani Therapeutics Holdings, Inc. (the "Company") and its subsidiary, Rani Therapeutics, LLC and, prior to December 15, 2022, Rani Management Systems, Inc., for the year ended December 31, 2022 and the three months ended March 31, 2023 and 2022, respectively. Unless we state otherwise or the context otherwise requires, the terms "we," "us," "our," and "Rani" and similar references refers to the Company and its consolidated subsidiaries.

Overview

We are a clinical stage biotherapeutics company focusing on advancing technologies to enable the administration of biologics and drugs orally, to provide patients, physicians, and healthcare systems with a convenient alternative to painful injections. We are advancing a portfolio of oral therapeutics using our proprietary delivery technology.

We are developing and clinically testing a drug-agnostic oral delivery platform, the RaniPill capsule, which is designed to deliver a wide variety of drug substances, including large molecules such as peptides, proteins, and antibodies. The current RaniPill capsule, the RaniPill GO, is designed to deliver up to a 3 mg dose of drug with high bioavailability. We are also developing a high-capacity version known as the RaniPill HC, which is in preclinical stage and which is intended to enable delivery of drug payloads up to 20 mg with high bioavailability. The RaniPill GO is optimized to orally deliver a variety of therapeutics, and we are advancing development of the RaniPill HC to address biologics and drugs with higher dosing requirements.

Since our inception in 2012, we have devoted the majority of our resources to research and development, manufacturing automation and scaleup, and establishing our intellectual property portfolio. To date, we have financed our operations primarily through an initial public offering ("IPO"), private placements of Rani LLC preferred units, the issuance of convertible promissory notes, long-term debt, and contract revenue generated from our evaluation agreements.

We do not have any products approved for sale, and we have not yet generated any revenue from sales of a commercial product. Our ability to generate product revenue sufficient to achieve profitability, if ever, will depend on the successful development of the RaniPill capsule, which we expect will take a number of years. Given our stage of development, we have not yet established a commercial organization or distribution capabilities, and we have no experience as a company in marketing drugs or a drug-delivery platform. When, and if, any of our product candidates are approved for commercialization, we plan to develop a commercialization infrastructure for those products in the United States, Europe, Asia, and potentially in certain other key markets. We may also rely on partnerships to provide commercialization infrastructure, including sales, marketing, and commercial distribution.

As is common with biotechnology companies, we rely on third-party suppliers for the supply of raw materials and active pharmaceutical ingredients ("APIs") and drug substances required for the production of our product candidates. In addition, we work with third parties to manufacture and develop biologics and drugs for inclusion in the current RaniPill capsule and RaniPill HC. Design work, prototyping and pilot manufacturing are performed in house, and we have utilized third-party engineering firms to assist with the design of manufacturing lines that support our supply of the current RaniPill capsule and RaniPill HC. Certain of our suppliers of components and materials are single source suppliers. We believe our vertically integrated manufacturing strategy will offer significant advantages, including rapid product iteration, control over our product quality and the ability to rapidly scale our manufacturing capacity. This capability also allows us to develop future generations of products while maintaining the confidentiality of our intellectual property. Our vertically integrated manufacturing strategy will result in material future capital outlays and fixed costs related to constructing and operating a manufacturing facility. We have invested and plan to continue to invest in automated manufacturing production lines for the current RaniPill capsule and RaniPill HC. Those assets deemed to have an alternative future

use have been capitalized as property and equipment while those projects related to our assets determined to not have an alternative future use have been expensed as research and development costs.

Clinical Update

Regulatory

In January 2023, we announced completion of a pre-Investigational New Drug (“IND") meeting with the U.S. Food and Drug Administration (“FDA”) with respect to RT-102, our RaniPill capsule containing parathyroid hormone (1-34) being developed for the potential treatment of osteoporosis. Following feedback from the meeting, we believe that a 505(b)(2) pathway is suitable for the development of RT-102 in the United States. In addition, we obtained guidance from the FDA on our preclinical and clinical development plans for RT-102, including the Phase 2 clinical trial which is expected to initiate in the second half of 2023.

RT-111

In January 2023, we announced entering into a License and Supply Agreement with Celltrion, Inc. (“Celltrion”) under which we receive a license and supply of Celltrion’s ustekinumab biosimilar for development and commercialization of RT-111 worldwide, subject to a right of first negotiation for Celltrion following completion of a Phase 1 clinical trial that meets its primary endpoint(s) (the “Celltrion Agreement”). RT-111 is the RaniPill capsule containing an ustekinumab biosimlar.

Financial Update

In August 2022, we entered into a loan and security agreement and related supplement (the “Loan Agreement”) with Avenue Venture Opportunities Fund, L.P (the “Lender”). The Loan Agreement provides for term loans (the “Loans”) in an aggregate principal amount up to $45.0 million. A Loan of $30.0 million was committed at closing, with $15.0 million funded immediately and $15.0 million available to be drawn between October 1, 2022 and December 31, 2022, which was drawn in December 2022. The remaining $15.0 million of Loans is uncommitted and is subject to certain conditions and approval by the Lender. The purpose of the Loans is for general corporate purposes. The Loan Agreement also contains various covenants and restrictive provisions. As of March 31, 2023, we were in compliance with all applicable debt covenants under the Loan Agreement and had cash, cash equivalents and marketable securities totaling $86.8 million.

In addition, in August 2022, we entered into a Controlled Equity^{SM} Sales Agreement (the “Sales Agreement”) with Cantor Fitzgerald & Co. and H.C. Wainwright & Co., LLC (collectively, the “Agents”), pursuant to which we may offer and sell from time to time through the Agents up to $150 million of shares of our Class A common stock, in such share amounts as we may specify by notice to the Agents, in accordance with the terms and conditions set forth in the Sales Agreement (“ATM Sales”). As of March 31, 2023, we had not delivered any placement notices to either of the Agents and there had been no ATM Sales.

Organizational Transactions

The Company was incorporated in April 2021 and formed for the purpose of facilitating an IPO of its Class A common stock, and to facilitate certain organizational transactions (“Organizational Transactions”) and to operate the business of Rani Therapeutics, LLC (“Rani LLC”) and its consolidated subsidiary at such time, Rani Management Services, Inc. (“RMS”). In connection with the IPO, we established a holding company structure with the Company as the holding company and its principal asset being the Class A common units (“Class A Units”) of Rani LLC that it owns. As the sole managing member of Rani LLC, the Company operates and controls all of Rani LLC’s operations, and through Rani LLC, conducts all of Rani LLC’s business and the financial results of Rani LLC and RMS (prior to December 15, 2022) are included in the consolidated financial statements of the Company. RMS was dissolved as of December 15, 2022.

Rani LLC has been, and after the IPO continues to be, treated as a pass-through entity for U.S. federal and state income tax purposes and accordingly has not been subject to U.S. federal or state income tax. The wholly owned subsidiary of Rani LLC, RMS, which was incorporated in 2019 and dissolved in December 2022, was taxed as a corporation for U.S. federal and most applicable state, local income tax and foreign tax purposes. As a result of its ownership of interests in Rani LLC ("LLC Interests"), the Company is subject to U.S. federal, state and local income taxes with respect to its allocable share of any taxable income of Rani LLC and will be taxed at the prevailing corporate tax rates. In addition to tax expenses, we also incur expenses related to our operations and may be required to make payments under the Tax Receivable Agreement with certain of the individuals and entities that continue to hold interests in Rani LLC after the IPO (the "Continuing LLC Owners"). The Continuing LLC Owners are entitled to exchange, subject to the terms of the Rani LLC Agreement, the Class A Units they hold in Rani LLC, together with the shares they hold of our Class B common stock (together referred to as a "Paired Interest"), in return for shares of our Class A common stock on a one-for-one basis provided that, at our election, we may effect a direct exchange of such Class A common stock or make a cash payment equal to a

volume weighted average market price of one share of Class A common stock for each Paired Interest redeemed. Any shares of Class B common stock will be cancelled on a one-for-one basis if, at the election of the Continuing LLC Owners, we redeem or exchange such Paired Interest pursuant to the terms of the Rani LLC Agreement. These exchanges and redemptions may result in increases in the tax basis of the assets of Rani LLC that otherwise would not have been available. Increases in tax basis resulting from such exchanges may reduce the amount of income tax that the Company would otherwise be required to pay in the future. This tax basis may also decrease the gains (or increase the losses) on future dispositions of certain assets to the extent tax basis is allocated to those assets. Due to the uncertainty of various factors, we cannot estimate the likely tax benefits we will realize as a result of exchanges, and the resulting amounts we will likely pay out to the Continuing LLC Owners pursuant to the Tax Receivable Agreement; however, we estimate that such payments may be substantial in the event we are profitable. Certain individuals who continue to own interests in Rani LLC but do not hold shares of the Company's Class B common stock ("non-corresponding Class A Units") have the ability to exchange their non-corresponding Class A Units of Rani LLC for 1,387,471 shares of the Company's Class A common stock.

Components of Results of Operations

Operating Expenses

Our operating expenses consisted of research and development and general and administrative activities.

Research and Development Expense

Research and development expense consists primarily of direct and indirect costs incurred in connection with our research and development activities to develop the RaniPill GO and RaniPill HC. These expenses include:

External expenses, consisting of:

- expenses associated with contract research organizations ("CROs"), for managing and conducting clinical trials;
- expenses associated with laboratory supplies, drug material for clinical trials, developing and manufacturing of the RaniPill GO, RaniPill HC and other materials;
- expenses associated with preclinical studies performed by third parties; and
- expenses associated with consulting, advisors, and other external services.

Internal expenses, consisting of:

- expenses including salaries, bonuses, stock-based compensation and benefits for personnel engaged in the research and development functions;
- expenses associated with service and repair of equipment, equipment depreciation, and allocated facility costs for research and development; and
- other research and development costs related to compliance with quality and regulatory requirements.

We expense research and development costs as incurred. Costs for external development activities are recognized based on an evaluation of the progress to completion of specific tasks using information provided to us by our vendors. Payments for these activities are based on the terms of the individual agreements, which may differ from the pattern of costs incurred, and are reflected in our financial statements as prepaid or accrued research and development expenses. Nonrefundable advance payments that we make for goods or services to be received in the future for use in research and development activities are recorded as prepaid expenses. Such amounts are recognized as an expense as the goods are delivered or the related services are performed, or until it is no longer expected that the goods will be delivered, or the services rendered. Until future commercialization is considered probable and the future economic benefit is expected to be realized, we do not capitalize pre-launch inventory costs.

Costs of property and equipment related to scaling-up our manufacturing capacity for clinical trials and to support commercialization are capitalized as property and equipment unless the related asset does not have an alternative future use.

The historical focus of our research and development has been on the RaniPill delivery platform and not tracked costs on a project-by-project basis associated with different drug compounds.

At this time, we cannot reasonably estimate or know the nature, timing, and estimated costs of the efforts that will be necessary to complete development of the RaniPill GO and RaniPill HC and complete the development of, and obtain regulatory approval for, our product candidates. We expect our research and development expenses to increase significantly in the foreseeable

future as we continue to invest in activities related to testing and developing the RaniPill GO and RaniPill HC and the development of our product candidates, as our product candidates advance into later stages of development, as we begin to conduct larger clinical trials, as we seek regulatory approvals for our product candidates upon successful completion of clinical trials, and incur expenses associated with hiring additional personnel to support the research and development efforts. The process of conducting the necessary clinical research to obtain regulatory approval is costly and time-consuming, the successful development of the RaniPill GO and RaniPill HC and our product candidates is highly uncertain, and we may never succeed in successfully developing the RaniPill GO and/or RaniPill HC or achieve the development of, and regulatory approval for, our product candidates.

General and Administrative Expenses

General and administrative expenses consist primarily of personnel-related costs (including salaries, bonuses, stock-based compensation, and benefits) for personnel in executive, finance, accounting, legal, corporate and business development, and other administrative functions. General and administrative expenses also include legal fees relating to corporate matters, professional fees paid for accounting, auditing, consulting, tax, and administrative consulting services, insurance costs, travel, and facilities, which include direct depreciation costs and allocated expenses for rent and maintenance of facilities and other operating costs.

We anticipate that our general and administrative expenses will increase significantly in the foreseeable future as additional administrative personnel and services are required to manage and support the development of the RaniPill GO and RaniPill HC and our product candidates. We also anticipate that we will incur increased expenses associated with operating as a public company, including costs of accounting, audit, legal, regulatory and tax-related services associated with maintaining compliance with exchange listing and SEC requirements, director and officer liability insurance, and investor and public relations.

Other Income (Expense), Net

Other income (expense), net primarily consists of interest income earned on our cash equivalents and marketable securities and interest expense from our long-term debt and amortization of debt discount and issuance costs.

Non-Controlling Interest

Non-controlling interest ("NCI") represents the portion of income or loss, net assets and comprehensive loss of our consolidated subsidiary that is not allocable to the Company based on its percentage of ownership of Rani LLC.

In August 2021, based on the Organizational Transactions, the Company became the sole managing member of Rani LLC. As of March 31, 2023, the Company held approximately 50% of the Class A Units of Rani LLC, and approximately 50% of the outstanding Class A Units of Rani LLC are held by the Continuing LLC Owners. Therefore, we report NCI based on the Class A Units of Rani LLC held by the Continuing LLC Owners on our condensed consolidated balance sheet as of March 31, 2023. Income or loss attributed to the NCI in Rani LLC is based on the Class A Units outstanding during the period for which the income or loss is generated and is presented on the condensed consolidated statements of operations and comprehensive income or loss.

Future exchanges of Paired Interests and non-corresponding Class A Units of Rani LLC will result in a change in ownership and reduce or increase the amount recorded as NCI and increase or decrease additional paid-in-capital when Rani LLC has positive or negative net assets, respectively. From the date of the Organizational Transactions to March 31, 2023, there were 5,173,947 exchanges of Paired Interests and 158,051 exchanges of non-corresponding Class A Units of Rani LLC for an equal number of shares of our Class A common stock.

Tax Receivable Agreement

In August 2021, in connection with the IPO and Organizational Transactions, we entered into a tax receivable agreement ("TRA") with certain of the Continuing LLC Owners. The TRA provides that we pay to such Continuing LLC Owners, 85% of the amount of tax benefits, if any, it is deemed to realize (calculated using certain assumptions) as a result of (i) increases in the tax basis of assets of Rani LLC resulting from (a) any future redemptions or exchanges of Paired Interests or non-corresponding Class A Units of Rani LLC and (b) payments under the TRA and (ii) certain other benefits arising from payments under the TRA (collectively the “Tax Attributes”).

A liability for the payable to parties subject to the TRA, and a reduction to stockholders’ equity, is accrued when (i) an exchange of a Paired Interest or non-corresponding Class A Units of Rani LLC has occurred and (ii) when it is deemed probable that the Tax Attributes associated with the exchange will be used to reduce our taxable income based on the contractual percentage of the benefit of Tax Attributes that we expect to receive over a period of time.

Relationship with InCube Labs, LLC

Services Agreements

In June 2021, Rani LLC entered into a service agreement with InCube Labs, LLC (“ICL”) effective retrospectively to January 1, 2021, and subsequently amended such agreement in March 2022 (as amended, the "Rani LLC-ICL Service Agreement"), pursuant to which Rani LLC and ICL agreed to provide personnel services to the other upon requests. Under the amendment in March 2022, Rani LLC has a right to occupy certain facilities leased by ICL in Milpitas, California and San Antonio, Texas (“Occupancy Services”) for general office, research and development, and light manufacturing. The Rani LLC-ICL Service Agreement has a twelve-month term and will automatically renew for successive twelve-month periods unless terminated; except that the Occupancy Services in Milpitas, California have a term until February 2024, following an extension granted in July 2022, with the potential for one additional annual renewal, subject to approval by the landlord upon a nine months’ notice of renewal prior to the end of the lease term, and the Occupancy Services in San Antonio, Texas continue until either party gives six months’ notice of termination. Except for the Occupancy Services, Rani LLC or ICL may terminate services under the Rani LLC-ICL Service Agreement upon 60 days' notice to the other party. The Rani LLC-ICL Service Agreement specifies the scope of services to be provided as well as the methods for determining the costs of services. Costs are billed or charged on a monthly basis by ICL or Rani LLC, respectively.

In June 2021, RMS entered into a service agreement with ICL (the “RMS-ICL Service Agreement”) effective retrospectively to January 1, 2021, pursuant to which ICL agreed to rent a specified portion of its facility in San Jose, California to RMS. Additionally, RMS and ICL agreed to provide personnel services to the other upon requests based on rates specified in the RMS-ICL Service Agreement. In April 2022, RMS assigned the RMS-ICL Service Agreement to Rani LLC. The RMS-ICL Service Agreement has a twelve-month term and will automatically renew for successive twelve-month periods unless terminated. Rani LLC or ICL may terminate services under the RMS-ICL Service Agreement upon 60 days' notice to the other party, except for occupancy which requires six months’ notice. The RMS-ICL Service Agreement specifies the scope of services to be provided as well as the methods for determining the costs of services. Costs are billed or charged on a monthly basis by ICL or Rani LLC, respectively, as well as allocations of expenses based upon Rani LLC’s utilization of ICL’s facilities and equipment.

The table below details the amounts charged by ICL for services and rent, net of the amount charged to ICL under the RMS-ICL Service Agreement, which is included in the condensed consolidated statements of operations and comprehensive loss (in thousands):

	Three Months Ended March 31,	
	2023	2022
Research and development	$ 310	$ 239
General and administrative	72	63
Total	$ 382	$ 302

Prior to April 2022, our eligible employees were permitted to participate in ICL’s 401(k) Plan (“401(k) Plan”). Participation in the 401(k) Plan was offered for the benefit of our employees, including our named executive officers, who satisfied certain eligibility requirements. In April 2022, the Company established its own 401(k) Plan, with participation offered for the benefit of the employees, including the Company’s named executive officers, who satisfy certain eligibility requirements.

As of March 31, 2023, all of our facilities are owned or leased by an entity affiliated with our Chairman. Rani LLC pays for the use of these facilities through our services agreements with ICL.

Exclusive License Agreement

In June 2021, we and ICL entered into an Amended and Restated Exclusive License Agreement which replaces the 2012 Exclusive License Agreement, as amended in 2013, and terminates the Intellectual Property Agreement, as amended in June 2013. Under the Amended and Restated Exclusive License Agreement, we have a fully paid, exclusive license under certain scheduled patents related to optional features of the device and certain other scheduled patents to exploit products covered by those patents in the field of oral delivery of sensors, small molecule drugs or biologic drugs including, any peptide, antibody, protein, cell therapy, gene therapy or vaccine. We will cover patent-related expenses and, after a certain period, we will have the right to acquire four specified United States patent families from ICL by making a one-time payment of $0.3 million to ICL for each United States patent family that we desire to acquire, up to $1.0 million in the aggregate. This payment will not become an obligation until the fifth anniversary of the Amended and Restated Exclusive License Agreement. The Amended and Restated Exclusive License Agreement will terminate when there are no remaining valid claims of the patents licensed under the Amended and Restated Exclusive License Agreement.

Additionally, we may terminate the Amended and Restated Exclusive License Agreement in its entirety or as to any particular licensed patent upon notification to ICL of such intent to terminate.

Non-Exclusive License Agreement between Rani and ICL ("Non-Exclusive License Agreement")

In June 2021, we entered into the Non-Exclusive License Agreement with ICL, pursuant to which we granted ICL a non-exclusive, fully-paid license under specified patents that were assigned from ICL to us. Additionally, we agreed not to license these patents to a third party in a specific field outside the field of oral delivery of sensors, small molecule drugs or biologic drugs including, any peptide, antibody, protein, cell therapy, gene therapy or vaccine, if ICL can prove that it or its sublicensee has been in active development of a product covered by such patents in that specific field. ICL may grant sublicenses under this license to third parties only with our prior approval. The Non-Exclusive License Agreement will continue in perpetuity unless terminated.

Intellectual Property Agreement with Mir Imran (the "Mir Agreement")

In June 2021, we entered into the Mir Agreement, pursuant to which we and Mir Imran agreed that we would own all intellectual property conceived (i) using any of our people, equipment, or facilities or (ii) that is within the field of oral delivery of sensors, small molecule drugs or biologic drugs including, any peptide, antibody, protein, cell therapy, gene therapy or vaccine. Neither us nor Mir Imran may assign the Mir Agreement to any third party without the prior written consent of the other party. The initial term of the Mir Agreement is three years, which can be extended upon mutual consent of the parties. The Mir Agreement may be terminated by either party for any reason within the initial three-year term upon providing three months' notice to the other party.

Tax Receivable Agreement

ICL is party to the TRA, entered into in August 2021 pursuant to the IPO and Organizational Transactions. The TRA provides that we pay to such entities and individuals 85% of the amount of tax benefits, if any, it is deemed to realize from exchanges of Paired Interests. During the three months ended March 31, 2023 and 2022, these parties to the TRA exchanged zero and 2,309,490 Paired Interests, respectively, that resulted in tax benefits subject to the TRA.

Registration Rights Agreement

In connection with the IPO, we entered into a Registration Rights Agreement with the Continuing LLC Owners, including ICL. The Registration Rights Agreement provides the Continuing LLC Owners certain registration rights whereby, at any time following the IPO and the expiration of any related lock-up period, the Continuing LLC Owners can require us to register under the Securities Act shares of Class A common stock issuable to them upon, at our election, redemption or exchange of their LLC Interests. The Registration Rights Agreement also provides for piggyback registration rights for the Continuing LLC Owners. As a result of certain stockholders exercising their registration rights under the Registration Rights Agreement, in December 2022 we filed a registration statement on Form S-3 to register 6,009,542 shares of our Class A common stock held by certain of our stockholders.

Rani LLC Agreement

We operate our business through Rani LLC and, prior to December 15, 2022, its subsidiary, RMS. RMS was dissolved on December 15, 2022. In connection with the IPO, we and the Continuing LLC Owners, including ICL, entered into the Fifth Amended and Restated LLC Agreement of Rani LLC (the "Rani LLC Agreement"). The governance of Rani LLC, and the rights and obligations of the holders of LLC Interests, are set forth in the Rani LLC Agreement. As a Continuing LLC Owner, ICL is entitled to exchange, subject to the terms of the Rani LLC Agreement, Paired Interests for our Class A common stock; provided that, at our election, we may effect a direct exchange of such Class A common stock or make a cash payment equal to a volume weighted average market price of one share of Class A common stock for each Paired Interest redeemed.

During the three months ended March 31, 2023 and 2022, these parties to the Rani LLC Agreement exchanged zero and 2,309,490 Paired Interests, respectively, for the Company's Class A common stock.

Results of Operations

The results of operations presented below should be reviewed in conjunction with the condensed consolidated financial statements and notes included elsewhere in this Quarterly Report on Form 10-Q. For information with respect to recent accounting pronouncements that are of significance or potential significance to us, see "Note 2. Summary of Significant Accounting Policies" in the "Notes to the Unaudited Condensed Consolidated Financial Statements" contained in Part I, Item 1 of this Quarterly Report on Form 10-Q.

Comparison of the three months ended March 31, 2023 and 2022

The following table summarizes our results of operations (in thousands):

	Three Months Ended March 31,		
	2023	2022	Change
Operating expenses			
Research and development	$ 9,712	$ 7,591	27.9 %
General and administrative	6,804	6,189	9.9 %
Total operating expenses	$ 16,516	$ 13,780	19.9 %
Loss from operations	(16,516)	(13,780)	19.9 %
Other income (expense), net			
Interest income and other, net	891	15	*
Interest expense and other, net	(1,207)	—	*
Loss before income taxes	(16,832)	(13,765)	22.3 %
Income tax expense	—	(63)	*
Net loss	$ (16,832)	$ (13,828)	21.7 %
Net loss attributable to non-controlling interest	(8,460)	(7,605)	11.2 %
Net loss attributable to Rani Therapeutics Holdings, Inc.	$ (8,372)	$ (6,223)	34.5 %

* Not meaningful

Research and Development Expenses

The following table reflects our research and development costs by nature of expense (in thousands):

	Three Months Ended March 31,	
	2023	2022
Payroll, stock-based compensation and related benefits	$ 7,372	$ 5,423
Facilities, materials and supplies	1,448	1,060
Third-party services	857	970
Other	35	138
Total	$ 9,712	$ 7,591

Research and development expenses were $9.7 million for the three months ended March 31, 2023, compared to $7.6 million for the three months ended March 31, 2022. The difference was primarily attributed to higher compensation costs of $1.9 million, which includes an increase of $0.4 million in stock-based compensation, due to headcount growth, and an increase of $0.4 million in facilities, materials and supplies expense related to preclinical and clinical development activities.

General and Administrative Expenses

General and administrative expenses were $6.8 million for the three months ended March 31, 2023, compared to $6.2 million for the three months ended March 31, 2022. The difference was primarily attributed to an increase in stock-based compensation of $1.1 million due to headcount growth, partially offset by a decrease in third-party services of $0.5 million due to non-recurring public company related costs.

Other Income (Expense), Net

Other expense, net, was $0.2 million for the three months ended March 31, 2023, compared to other income, net, which was de minimis for the three months ended March 31, 2022. The difference was primarily attributed to an increase in interest income

of $0.9 million from our investment in marketable securities offset by an increase in interest expense of $1.2 million from our long-term debt.

Liquidity and Capital Resources

Source of Liquidity

We have not generated any revenue from commercial product sales and have incurred significant operating losses and negative cash flows from operations. We have not yet commercialized any products, and we do not expect to generate revenue from sales of commercial products for several years, if at all. We anticipate that we will continue to incur net losses for the foreseeable future. Since our inception, we have devoted substantially all of our resources on organizing and staffing our company, business planning, research and development activities, including the RaniPill platform design, drug formulation, preclinical studies, clinical trials, manufacturing automation and scale up, establishing our intellectual property portfolio, and providing general and administrative support for these operations. To date, we have financed our operations primarily through an IPO, private placements of Rani LLC preferred units, the issuance of convertible promissory notes, and long-term debt, as well as contract revenue generated from evaluation agreements.

In August 2022, we entered into the Loan Agreement with the Lender. The Loan Agreement provides for Loans in an aggregate principal amount up to $45.0 million. A Loan of $30.0 million was committed at closing, with $15.0 million funded immediately and $15.0 million available to be drawn between October 1, 2022 and December 31, 2022, which was drawn in December 2022. The remaining $15.0 million of Loans is uncommitted and is subject to certain conditions and approval by the Lender. The purpose of the Loans is for general corporate purposes. The Loan Agreement also contains various covenants and restrictive provisions. As of March 31, 2023, we were in compliance with all applicable debt covenants under the Loan Agreement and had cash, cash equivalents and marketable securities totaling $86.8 million.

In August 2022, we entered into the Sales Agreement with the Agents, pursuant to which we may offer and sell from time to time through the Agents up to $150.0 million of shares of our Class A common stock in ATM Sales. As of March 31, 2023, we had not delivered any placement notices to either of the Agents and there had been no ATM Sales.

Since our inception, we have incurred significant losses and negative cash flows from operations. Our net losses were $16.8 million and $13.8 million for the three months ended March 31, 2023 and 2022, respectively. As of March 31, 2023, we had an accumulated deficit of $47.3 million. We expect to continue to incur significant losses for the foreseeable future, and our net losses may fluctuate significantly from period to period, depending on the timing of and expenditures on our planned research and development activities. Until such time as we can generate sufficient revenue from commercial product sales, if ever, we expect to finance our operations through a combination of equity offerings and debt financings, which may include ATM Sales, or other capital sources, which may include strategic collaborations or other arrangements with third parties. We may be unable to raise additional funds or to enter into such agreements or arrangements on favorable terms, or at all. If we are unable to raise capital or enter into such agreements as and when needed, we may have to significantly delay, scale back or discontinue the development or commercialization of one or more of our product candidates. Insufficient liquidity may also require us to relinquish rights to product candidates at an earlier stage of development or on less favorable terms than we would otherwise choose.

Tax Receivable Agreement

We entered into a Tax Receivable Agreement with certain of the Continuing LLC Owners in August 2021 in connection with the IPO. The Tax Receivable Agreement provides for our payment to certain of the Continuing LLC Owners of 85% of the amount of tax benefits, if any, that we are deemed to realize as a result of any basis adjustments and certain other tax benefits arising from payments under the Tax Receivable Agreement. We will have in effect an election under Section 754 of the Code effective for each taxable year in which a redemption or exchange (including deemed exchange) of LLC Interests for shares of our Class A common stock or cash occurs. These Tax Receivable Agreement payments are not conditioned upon any continued ownership interest in either the Company or Rani LLC by such Continuing LLC Owners. The rights of such Continuing LLC Owners under the Tax Receivable Agreement are assignable to transferees of their LLC Interests (other than us as transferee pursuant to subsequent redemptions (or exchanges) of the transferred LLC Interests). We expect to benefit from the remaining 15% of tax benefits, if any, that we may realize.

As of March 31, 2023, we have not recorded a liability under the TRA related to the income tax benefits originating from the exchanges of Paired Interest or non-corresponding Class A Units of Rani LLC as it is not probable that the Company will realize such tax benefits. To the extent the Company is able to realize the income tax benefits associated with the exchanges of Paired Interest or non-corresponding Class A Units of Rani LLC subject to the TRA, the TRA payable would range from zero to $22.9 million at March 31, 2023.

The amounts payable under the TRA will vary depending upon a number of factors, including the amount, character, and timing of the taxable income of the Company in the future. Should the Company determine that the payment of the TRA liability becomes probable at a future date based on new information, any changes will be recorded on the Company's condensed consolidated statement of operations and comprehensive loss at that time.

Future Funding Requirements

Based on our current operating plan, we estimate that our existing cash and cash equivalents will be sufficient to fund our operating expenses and capital expenditure requirements through at least the next twelve months. We have based this estimate on assumptions that may prove to be wrong, and we could utilize our available capital resources sooner than we expect. Because of the numerous risks and uncertainties associated with the development of the RaniPill GO, RaniPill HC and our product candidates and because the extent to which we may enter into strategic collaborations or other arrangements with third parties for development of the RaniPill GO, RaniPill HC and/or our product candidates is unknown, we are unable to estimate the timing and amounts of increased capital outlays and operating expenses associated with completing the research and development of our product candidates.

To date, we have not generated any commercial product revenue. We do not expect to generate any commercial product revenue unless and until we obtain regulatory approval and commercialize any of our commercial product candidates, and we do not know when, or if at all, that will occur. We will continue to require additional capital to develop our product candidates and fund operations for the foreseeable future. Our primary uses of cash are to fund our operations, which consist primarily of research and development expenses related to our programs, manufacturing automation and scaleup, and general and administrative expenses. We expect our expenses to continue to increase in connection with our ongoing activities as we continue to advance the RaniPill GO, RaniPill HC and our product candidates. In addition, we expect to incur additional costs operating as a public company.

We may seek to raise capital through equity offerings or debt financings, which may include ATM Sales, collaboration agreements, or other arrangements with other companies, or through other sources of financing. Adequate additional funding may not be available to us on acceptable terms or at all. Our failure to raise capital as and when needed could have a negative impact on our consolidated financial condition and our ability to pursue our business strategies. We anticipate that we will need to raise substantial additional capital, the requirements of which will depend on many factors, including:

- the progress, costs, trial design, results of and timing of our preclinical studies and clinical trials;
- the progress, costs, and results of our research pipeline;
- the willingness of the FDA, or other regulatory authorities to accept data from our clinical trials, as well as data from our completed and planned clinical trials and preclinical studies and other work, as the basis for review and approval of our product candidates or collaborator drugs or biologics paired with the RaniPill GO capsule and/or RaniPill HC for various indications;
- the outcome, costs, and timing of seeking and obtaining FDA and any other regulatory approvals;
- the number and characteristics of product candidates that we pursue;
- our ability to manufacture sufficient quantities of the RaniPill capsules;
- our need to expand our research and development activities;
- the costs associated with manufacturing our product candidates, including establishing commercial supplies and sales, marketing, and distribution capabilities;
- the costs associated with securing and establishing commercial infrastructure;
- the costs of acquiring, licensing, or investing in businesses, product candidates, and technologies;
- our ability to maintain, expand, and defend the scope of our intellectual property portfolio, including the amount and timing of any payments we may be required to make, or that we may receive, in connection with the licensing, filing, prosecution, defense, and enforcement of any patents or other intellectual property rights;
- our need and ability to retain key management and hire scientific, technical, business, and engineering personnel;
- the effect of competing drugs and product candidates and other market developments;
- the timing, receipt, and amount of sales from our potential products, if approved;
- our ability to establish strategic collaborations;
- our need to implement additional internal systems and infrastructure, including financial and reporting systems;

- security breaches, data losses or other disruptions affecting our information systems; and
- the economic and other terms, timing of and success of any collaboration, licensing, or other arrangements which we may enter in the future.

If we raise additional capital through debt financing, we may be subject to covenants that restrict our operations including limitations on our ability to incur liens or additional debt, pay dividends, make certain investments, and engage in certain merger, consolidation, or asset sale transactions. Any debt financing or additional equity that we raise may contain terms that are not favorable to us. If we raise funds through collaborations, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs, product candidates or grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds when needed, we may be required to delay, reduce, or terminate some or all of our development programs and clinical trials or delay investments in our manufacturing scale-up and automation. In addition, our ability to raise additional capital may be adversely impacted by potential worsening global economic conditions and the recent disruptions to and volatility in the credit and financial markets globally.

The following table summarizes our cash, cash equivalents and marketable securities:

	March 31, 2023	December 31, 2022
Cash and cash equivalents	$ 18,984	$ 27,007
Marketable securities	67,803	71,475
Total cash, cash equivalents and marketable securities	$ 86,787	$ 98,482

As of March 31, 2023, we had cash, cash equivalents and marketable securities of $86.8 million, compared to $98.5 million as of December 31, 2022. We believe our cash, cash equivalents and marketable securities will be sufficient to meet our anticipated operating requirements for at least the next twelve months following the date of issuance of these condensed consolidated financial statements.

Cash Flows

The following table summarizes our cash flows for the periods presented (in thousands):

	Three Months Ended March 31,	
	2023	2022
Net cash used in operating activities	$ (12,154)	$ (9,360)
Net cash provided by (used in) investing activities	4,123	(254)
Net cash provided by financing activities	8	—
Net decrease in cash, cash equivalents and restricted cash equivalents	$ (8,023)	$ (9,614)

Operating Activities

Net cash used in operating activities for the three months ended March 31, 2023 was $12.2 million, which was primarily attributable to a net loss of $16.8 million, partially offset by stock-based compensation expense of $4.4 million, net accretion and amortization of investments in marketable securities of $0.7 million, and non-cash depreciation and amortization expense of $0.2 million. Additionally, there was an increase in accrued expenses and other current liabilities of $0.3 million and a decrease in prepaid expenses and other current assets of $0.3 million for the three months ended March 31, 2023.

Net cash used in operating activities for the three months ended March 31, 2022 was $9.4 million, which was primarily attributable to a net loss of $13.8 million, partially offset by stock-based compensation expense of $2.9 million. Additionally, there was an increase in accrued expenses and other current liabilities of $0.6 million and a decrease of $0.7 million in prepaid expenses and other current assets due to amortization of director and officer liability insurance, as a result of becoming a publicly traded company.

Investing Activities

For the three months ended March 31, 2023, net cash provided by investing activities was $4.1 million consisting of $23.0 million in proceeds from maturities of marketable securities partially offset by $18.6 million and $0.3 million in purchases of marketable securities and property and equipment, respectively.

For the three months ended March 31, 2022, net cash used in investing activities was $0.3 million consisting solely of purchases of property and equipment.

Financing Activities

For the three months ended March 31, 2023, net cash provided by financing activities was de minimis.

For the three months ended March 31, 2022, there were no financing activities.

Contractual Obligations and Other Commitments

Except as discussed below, there have been no material changes to our contractual obligations and other commitments as of March 31, 2023, as compared to those disclosed in our Annual Report on Form 10-K.

The following table summarizes our contractual obligations and commitments as of March 31, 2023 (in thousands):

	As of March 31, 2023		
	Total	Short-term	Long-term
Operating leases (1)	$ 1,423	$ 923	$ 500
Debt obligations (2)	31,650	—	31,650
Total	$ 33,073	$ 923	$ 32,150

(1) Represents operating lease payments. See Note 7 to the condensed consolidated financial statements contained in Part I, Item 1 of this Quarterly Report on Form 10-Q for additional information.

(2) Represents long-term debt principal maturities and final payment equal to 5.5% of aggregate amount funded, excluding interest. See Note 11 to the condensed consolidated financial statements contained in Part I, Item 1 of this Quarterly Report on Form 10-Q for additional information.

In addition, we enter into agreements in the normal course of business with contract research organizations for clinical trials and with vendors for preclinical studies and other services and products for operating purposes, which are generally cancelable upon written notice.

Critical Accounting Policies and Estimates

This discussion and analysis of financial condition and results of operation is based on our condensed consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of financial statements requires management to make estimates and judgments that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities as of the date of the financial statements and the reported amounts of expenses during the reporting period. On an ongoing basis, management evaluates its estimates and assumptions. Our estimates are based on our historical experience and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

For further information on our significant accounting policies, refer to our Annual Report on Form 10-K for the year ended December 31, 2022, filed with the SEC on March 22, 2023.

Recently Adopted Accounting Standards

None.

Other Information

JOBS Act Accounting Election

We are an “emerging growth company” within the meaning of the Jumpstart Our Business Startups Act of 2012 (the “JOBS Act”). The JOBS Act permits an emerging growth company like us to take advantage of an extended transition period to comply with new or revised accounting standards applicable to public companies. We are electing to use this extended transition

period and we will therefore comply with new or revised accounting standards on the earlier of (i) when they apply to private companies; or (ii) when we lose our emerging growth company status. As a result, our financial statements may not be comparable with companies that comply with public company effective dates for accounting standards. We also rely on other exemptions provided by the JOBS Act, including not being required to comply with the auditor attestation requirements of Section 404(b) of the Sarbanes-Oxley Act unless we cease to be an emerging growth company.

We will remain an emerging growth company until the earliest of (1) December 31, 2026 (the last day of the fiscal year following the fifth anniversary of the closing of our initial public offering), (2) the last day of the fiscal year in which we have total annual gross revenue of at least $1.235 billion, (3) 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 Securities Exchange Act of 1934, as amended (the "Exchange Act"), which would occur if the market value of our Class A 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 (4) the date on which we have issued more than $1.0 billion in non-convertible debt securities during the prior three-year period.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

We are a smaller reporting company as defined by Rule 12b-2 of the Exchange Act and are not required to provide the information required under this item.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we evaluated the effectiveness of our disclosure controls and procedures pursuant to Rule 13a-15(e) and 15(d)-15(e) under the Exchange Act as of the end of the period covered by this Quarterly Report on Form 10-Q. Our disclosure controls and procedures are designed to ensure that information required to be disclosed in the reports we file or submit under the Exchange Act 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 the Chief Executive Officer and the Chief Financial Officer, to allow timely decisions regarding required disclosures. Any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objective and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on that evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that our disclosure controls and procedures were effective at a reasonable assurance level as of March 31, 2023.

Changes in Internal Control over Financial Reporting

There have been no changes in our internal control over financial reporting, as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act, during the three months ended March 31, 2023 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Inherent Limitations on Effectiveness of Controls

Our management, including our Chief Executive Officer and Chief Financial Officer, believes that our disclosure controls and procedures over financial reporting are designed to provide reasonable assurance of achieving their objectives and are effective at the reasonable assurance level. However, our management does not expect that our disclosure controls and procedures will prevent or detect all errors and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, have been detected. These inherent limitations include the realities that judgments in decision making can be faulty and that breakdowns can occur because of a simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the controls. 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.

PART II—OTHER INFORMATION

Item 1. Legal Proceedings

From time to time, we may become involved in litigation or other legal proceedings. We are not currently a party to any litigation or legal proceedings that, in the opinion of our management, are likely to have a material adverse effect on our business. Regardless of outcome, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management resources, and other factors.

Item 1A. Risk Factors

There have been no material changes to the risk factors disclosed under the heading “Risk Factors” in our most recent Annual Report on Form 10-K.

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

None.

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

None.

Item 6. Exhibits

The following is a list of all exhibits filed or furnished as part of this report:

Exhibit Number	Description
3.1	Amended and Restated Certificate of Incorporation of the Registrant as currently in effect (incorporated by reference to Exhibit 3.1 to the Registrant's Registration Statement on Form S-1, as amended, filed with the SEC on July 26, 2021).
3.2	Amended and Restated Bylaws of the Registrant as currently in effect (incorporated by reference to Exhibit 3.4 to the Registrant's Registration Statement on Form S-1, as amended, filed with the SEC on July 9, 2021).
10.1x	License and Supply Agreement by and between Rani Therapeutics, LLC and Celltrion, Inc. dated January 6, 2023 (incorporated by reference to Exhibit 10.27 to the Registrant's Annual Report on Form 10-K filed with the SEC on March 22, 2023).
31.1*	Certification of Principal Executive Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2*	Certification of Principal Financial Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1*†	Certification of Principal Executive Officer and Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
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.
101.SCH	Inline XBRL Taxonomy Extension Schema Document
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

* Filed herewith.

† The certifications attached as Exhibit 32.1 which accompanies this Quarterly Report on Form 10-Q, are not deemed filed with the Securities and Exchange Commission and are not to be incorporated by reference into any filing of the Registrant under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of this Quarterly Report on Form 10-Q), irrespective of any general incorporation language contained in such filing.

x Portions of this exhibit have been omitted as the Registrant has determined that (i) the omitted information is not material and (ii) the omitted material is of the type that the Registrant treats as private or confidential.

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.

Rani Therapeutics Holdings, Inc.

Date: May 10, 2023

By: /s/ Talat Imran

Talat Imran
Chief Executive Officer
(Principal Executive Officer)

Date: May 10, 2023

By: /s/ Svai Sanford

Svai Sanford
Chief Financial Officer
(Principal Financial and Accounting Officer)

Exhibit 31.1

CERTIFICATION

I, Talat Imran, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Rani Therapeutics Holdings, Inc.;

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

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

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

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

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

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

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

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

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

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

Date: May 10, 2023

/s/ Talat Imran

Talat Imran

Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION

I, Svai Sanford, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Rani Therapeutics Holdings, Inc.;

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

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

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

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

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

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

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

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

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

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

Date: May 10, 2023

/s/ Svai Sanford
Svai Sanford

Chief Financial Officer
(Principal Financial and Accounting Officer)

Exhibit 32.1

CERTIFICATION

Pursuant to the requirement set forth in Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended, (the "Exchange Act") and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. §1350), Talat Imran, Chief Executive Officer of Rani Therapeutics Holdings, Inc. (the "Company"), and Svai Sanford, Chief Financial Officer of the Company, each hereby certifies that, to the best of his knowledge:

1. The Company's Quarterly Report on Form 10-Q for the period ended March 31, 2023, to which this Certification is attached as Exhibit 32.1 (the "Periodic Report"), fully complies with the requirements of Section 13(a) or Section 15(d) of the Exchange Act; and

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

Dated: May 10, 2023

In Witness Whereof, the undersigned have set their hands hereto as of the 10th day of May, 2023.

/s/ Talat Imran	/s/ Svai Sanford
Talat Imran	Svai Sanford
Chief Executive Officer	Chief Financial Officer
(Principal Executive Officer)	*(Principal Financial and Accounting Officer)*

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