

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 June 30, 2023

OR

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

For the transition period from _____ to _____

Commission File Number: 001-39971

Landos Biopharma, Inc.

(Exact Name of Registrant as Specified in its Charter)

Delaware

(State or other jurisdiction of
incorporation or organization)

P.O. Box 11239

Blacksburg, Virginia

(Address of principal executive offices)

81-5085535

(I.R.S. Employer
Identification No.)

24062

(Zip Code)

(540) 218-2232

Registrant's telephone number, including area code

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common stock, par value \$0.01 per share	LABP	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	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>
Emerging growth company	<input checked="" type="checkbox"/>		

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 August 4, 2023, the registrant had 3,116,729 shares of common stock, \$0.01 par value per share, outstanding.

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PART I—FINANCIAL INFORMATION

Item 1. Financial Statements. (Unaudited)

Landos Biopharma, Inc.
Condensed Consolidated Balance Sheets
(in thousands, except share and per share amounts)

	June 30, 2023 (Unaudited)	December 31, 2022
Assets		
Current assets:		
Cash and cash equivalents	\$ 44,049	\$ 36,640
Marketable securities, available-for-sale	687	7,762
Prepaid expenses and other current assets	1,549	851
Total current assets	46,285	45,253
Total assets	\$ 46,285	\$ 45,253
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	\$ 1,029	\$ 3,435
Accrued liabilities	1,986	2,687
Total current liabilities	3,015	6,122
Total liabilities	3,015	6,122
Commitments and contingencies (Note 7)		
Stockholders' equity:		
Preferred stock, \$0.01 par value; 10,000,000 shares authorized, no shares issued and outstanding as of June 30, 2023 and December 31, 2022	—	—
Common stock, \$0.01 par value; 20,000,000 shares authorized, 3,116,729 and 4,025,489 shares issued and outstanding as of June 30, 2023 and December 31, 2022, respectively	31	40
Additional paid-in capital	186,629	172,575
Accumulated other comprehensive loss	(7)	(57)
Accumulated deficit	(143,383)	(133,427)
Total stockholders' equity	43,270	39,131
Total liabilities and stockholders' equity	\$ 46,285	\$ 45,253

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

Landos Biopharma, Inc.
Condensed Consolidated Statements of Operations and Comprehensive Loss
(in thousands, except share and per share amounts)
(Unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
Operating expenses:				
Research and development	\$ 2,463	\$ 6,604	\$ 5,789	\$ 17,404
General and administrative	1,976	4,662	5,129	8,815
Total operating expenses	4,439	11,266	10,918	26,219
Loss from operations	(4,439)	(11,266)	(10,918)	(26,219)
Other income:				
(Loss) gain from foreign exchange	(40)	25	(44)	26
Interest and other income (expense), net	557	(43)	1,006	45
Other income (expense), net	517	(18)	962	71
Net loss	\$ (3,922)	\$ (11,284)	\$ (9,956)	\$ (26,148)
Net loss per share, basic and diluted	\$ (0.63)	\$ (2.80)	\$ (1.57)	\$ (6.50)
Weighted-average shares used to compute net loss per share, basic and diluted	6,207,707	4,025,489	6,345,206	4,025,489
Comprehensive loss:				
Net loss	\$ (3,922)	\$ (11,284)	\$ (9,956)	\$ (26,148)
Unrealized (loss) gain on available-for-sale securities	(86)	75	50	(167)
Comprehensive loss	\$ (4,008)	\$ (11,209)	\$ (9,906)	\$ (26,315)

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

Landos Biopharma, Inc.
Condensed Consolidated Statements of Cash Flows
(in thousands)
(Unaudited)

	Six Months Ended June 30,	
	2023	2022
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net loss	\$ (9,956)	\$ (26,148)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation	—	577
Stock-based compensation expense	478	1,575
Amortization of premium on marketable securities	47	549
Non-cash loss on termination of lease	—	137
Gain on sale of equipment	—	(23)
Changes in operating assets and liabilities:		
Prepaid expenses and other assets	(698)	(1,007)
Accounts payable	(2,475)	(8,255)
Other liabilities	(676)	(1,904)
Net cash used in operating activities	<u>(13,280)</u>	<u>(34,499)</u>
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchase of property and equipment	—	(7)
Proceeds from sale of property and equipment	—	35
Purchase of available-for-sale marketable securities	—	(3,672)
Proceeds from sales and maturities of marketable securities	7,078	49,021
Net cash provided by investing activities	<u>7,078</u>	<u>45,377</u>
CASH FLOWS FROM FINANCING ACTIVITIES:		
Proceeds from issuance of pre-funded warrants for the purchase of common stock, net of issuance costs	16,567	—
Repurchase and retirement of common stock	(3,000)	—
Net cash provided by financing activities	<u>13,567</u>	<u>—</u>
Net change in cash and cash equivalents	7,365	10,878
Cash and cash equivalents at beginning of period	36,640	8,305
Effect of exchange rates on cash	44	58
Cash and cash equivalents at end of period	<u>\$ 44,049</u>	<u>\$ 19,241</u>
Supplemental non-cash disclosure:		
NONCASH INVESTING AND FINANCING ACTIVITIES:		
Non-cash gain on sale of fixed assets	\$ —	\$ 14
Operating right-of-use asset obtained in exchange for operating lease liability	\$ —	\$ 824
Derecognition of operating right-of-use asset and operating lease liability upon termination of lease	\$ —	\$ 714
Unrealized gain (loss) on available-for-sale marketable securities	\$ 50	\$ (167)

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

Landos Biopharma, Inc.
Condensed Consolidated Statements of Changes in Stockholders' Equity
(in thousands, except share amounts)
(Unaudited)

	<u>Common Stock</u>		Additional Paid-in Capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amounts				
Balance at December 31, 2022	4,025,489	\$ 40	\$ 172,575	\$ (57)	\$ (133,427)	\$ 39,131
Repurchase and retirement of common stock	(908,644)	(9)	(2,991)	—	—	(3,000)
Issuance of pre-funded warrants for the purchase of common stock, net of issuance costs	—	—	16,567	—	—	16,567
Stock-based compensation expense	—	—	224	—	—	224
Unrealized gain on available-for-sale securities	—	—	—	136	—	136
Net loss	—	—	—	—	(6,034)	(6,034)
Balance at March 31, 2023	<u>3,116,845</u>	<u>\$ 31</u>	<u>\$ 186,375</u>	<u>\$ 79</u>	<u>\$ (139,461)</u>	<u>\$ 47,024</u>
Fractional shares adjustment due to reverse stock split	(116)	—	—	—	—	—
Stock compensation expense	—	—	254	—	—	254
Unrealized loss on available-for-sale securities	—	—	—	(86)	—	(86)
Net loss	—	—	—	—	(3,922)	(3,922)
Balance at June 30, 2023	<u>3,116,729</u>	<u>\$ 31</u>	<u>\$ 186,629</u>	<u>\$ (7)</u>	<u>\$ (143,383)</u>	<u>\$ 43,270</u>

	<u>Common Stock</u>		Additional Paid-in Capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amounts				
Balance at December 31, 2021	4,025,489	\$ 40	\$ 170,604	\$ (225)	\$ (94,151)	\$ 76,268
Stock-based compensation expense	—	—	941	—	—	941
Unrealized loss on available-for-sale securities	—	—	—	(242)	—	(242)
Net loss	—	—	—	—	(14,864)	(14,864)
Balance at March 31, 2022	<u>4,025,489</u>	<u>\$ 40</u>	<u>\$ 171,545</u>	<u>\$ (467)</u>	<u>\$ (109,015)</u>	<u>\$ 62,103</u>
Stock compensation expense	—	—	634	—	—	634
Unrealized gain on available-for-sale securities	—	—	—	75	—	75
Net loss	—	—	—	—	(11,284)	(11,284)
Balance at June 30, 2022	<u>4,025,489</u>	<u>\$ 40</u>	<u>\$ 172,179</u>	<u>\$ (392)</u>	<u>\$ (120,299)</u>	<u>\$ 51,528</u>

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

Landos Biopharma, Inc.
Notes to Unaudited Condensed Consolidated Financial Statements

1. Organization and Description of the Business

Landos Biopharma, Inc. (“Landos” or the “Company”) was incorporated in the state of Delaware in January 2017 and is a clinical-stage biopharmaceutical company focused on the discovery and development of oral therapeutics for patients with autoimmune diseases. The Company has several active development programs, each discovered internally, targeting novel pathways at the interface of immunity and metabolism.

Reverse Stock Split

In May 2023, the Company’s stockholders approved a reverse stock split at the annual meeting of stockholders, and subsequently, the Company effected a one-for-ten (1-for-10) reverse stock split (the “Reverse Stock Split”) of its outstanding common stock and a corresponding reduction in the total number of authorized shares of its common stock from 200,000,000 to 20,000,000. All references to common stock, pre-funded warrants to purchase common stock, options to purchase common stock, restricted stock units, share data, per share data and related information contained in the condensed consolidated financial statements have been retrospectively adjusted to reflect the effect of the Reverse Stock Split for all periods presented. No fractional shares were issued as a result of the Reverse Stock Split. Stockholders of record who would otherwise have been entitled to receive a fractional share received a cash payment in lieu thereof.

Nasdaq Listing Rule Compliance

In June 2022, the Company received a notice from the Listing Qualifications Department of The Nasdaq Stock Market (“Nasdaq”) notifying the Company that its listed securities did not maintain the minimum bid price requirement of \$1.00 per share of common stock for continued listing on the Nasdaq Global Market. In December 2022, Nasdaq approved the Company’s application to transfer to The Nasdaq Capital Market and notified the Company that it has been granted an additional 180-calendar day compliance period to regain compliance with the minimum bid price requirement. To regain compliance, the Company effected the Reverse Stock Split in May 2023. The Company received notice from Nasdaq in June 2023 that it had regained compliance with the minimum bid price listing requirement.

Liquidity

As of June 30, 2023, the Company had cash, cash equivalents and marketable securities of \$44.7 million, which it believes will be sufficient to fund its planned operations for at least one year from the issuance of these condensed consolidated financial statements. Since the Company’s inception in 2017, it has funded its operations through the issuance of convertible preferred stock and convertible promissory notes, the proceeds from its IPO, the upfront payment from the license and collaboration agreement and the sale of pre-funded warrants in a private placement. As of June 30, 2023, the Company had an accumulated deficit of \$143.4 million and expects to incur substantial operating losses for at least the next several years. As such, the Company will need to raise additional capital to initiate and complete its ongoing and planned clinical trials, to continue and expand its research and development operations that support its ongoing and planned discovery, development and clinical and regulatory activities and to adequately prepare for commercialization of its product candidates that may achieve regulatory approval in the future.

2. Summary of Significant Accounting Policies

Basis of Presentation

The accompanying condensed consolidated financial statements include the accounts of the Company and its wholly owned subsidiary, Landos Biopharma Australia Pty Ltd. All intercompany balances and transactions have been eliminated in consolidation.

The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the U.S. (“GAAP”) for interim financial information, the instructions to Form 10-Q and Article 10 of Regulation S-X. Accordingly, they do not include all of the information and footnotes required by GAAP for complete financial statements and should be read in conjunction with the Company’s audited financial statements and notes thereto included in its Annual Report on Form 10-K for the year ended December 31, 2022. In the opinion of the Company’s management, all adjustments, consisting of normal recurring adjustments, necessary for a fair presentation of its financial position, operating results and cash flows for the periods presented have been included. Operating results for the three and six months ended June 30, 2023 are not necessarily indicative of the results that may be expected for the full year, for any other interim period or for any future year.

Use of Estimates

The preparation of consolidated financial statements in conformity with GAAP requires management to make certain estimates and assumptions that affect the reported amounts in the Company's consolidated financial statements and the disclosures made in the accompanying notes. Significant estimates and assumptions made in the accompanying condensed consolidated financial statements include, but are not limited to, accrued liabilities, fair value of equity instruments and uncertain tax positions. The Company evaluates its estimates and assumptions on an ongoing basis using historical experience and other factors and adjusts those estimates and assumptions when facts and circumstances dictate. Despite management's intention to establish accurate estimates and use reasonable assumptions, actual results may differ from the Company's estimates.

Significant Accounting Policies

The significant accounting policies used in preparation of these unaudited condensed consolidated financial statements for the three and six months ended June 30, 2023 are consistent with, and should be read in conjunction with, those discussed in Note 1 of the consolidated financial statements in the Company's Annual Report on Form 10-K for the year ended December 31, 2022.

Cash and Cash Equivalents

Cash and cash equivalents consist of cash and highly liquid investments with original maturities of three months or less at the date of purchase. The carrying amounts approximate fair value due to the short maturities of these investments. Cash equivalents consist primarily of amounts invested in money market funds and are stated at fair value.

Marketable Securities

The Company's investments in marketable securities are maintained by investment managers and consist of corporate debt securities and asset backed securities with original maturities of over 90 days, all of which are considered available-for-sale debt securities. The Company classifies its available-for-sale securities as short-term marketable securities on the Condensed Consolidated Balance Sheets, even though the stated maturity date may be one year or more beyond the current Condensed Consolidated Balance Sheets date, as the Company views those securities as available for use in current operations, if needed.

Available-for-sale securities are carried at fair value with their unrealized gains and losses included in accumulated other comprehensive loss within stockholders' equity, until such gains and losses are realized in other income, net, within the Condensed Consolidated Statements of Operations and Comprehensive Loss, except for the changes in allowance for expected credit losses, which are recorded in other income, net, within the Condensed Consolidated Statements of Operations and Comprehensive Loss. Realized gains and losses are determined using the specific identification method.

The Company conducts periodic reviews to identify and evaluate each investment in its portfolio that has an unrealized loss to determine whether a credit loss exists. An unrealized loss exists when the current fair value of an individual security is less than its amortized cost basis.

A credit loss is estimated by considering available information relevant to the collectability of the security and information about past events, current conditions and reasonable and supportable forecasts. Any credit loss is recorded as a charge to other income, net, not to exceed the amount of the unrealized loss. Unrealized losses other than the credit loss are recognized in accumulated other comprehensive loss. When determining whether a credit loss exists, the Company considers several factors, including whether the Company has the intent to sell the security or whether it is more likely than not that the Company will be required to sell the security prior to recovery of its amortized cost basis. If the Company has an intent to sell, or if it is more likely than not that the Company will be required to sell a debt security in an unrealized loss position before recovery of its amortized cost basis, the Company will write down the security to its fair value and record the corresponding charge as a component of other income, net. No declines in value were deemed to be credit losses as of January 1, 2023, the adoption date of Accounting Standards Update ("ASU") 2016-13—*Financial Instruments (Topic 326) Measurement of Credit Losses on Financial Instrument* ("ASU 2016-23"), or during the three and six months ended June 30, 2023.

Concentrations of Credit Risk

Financial instruments that potentially subject the Company to a concentration of credit risk consist primarily of cash, cash equivalents and marketable securities. Bank deposits are held by accredited financial institutions, and these deposits are often in excess of insured limits. The Company limits its credit risk associated with cash and cash equivalents by placing them with financial institutions it believes are of high quality.

The Company's available-for-sale investments primarily consist of high-grade corporate debt securities and asset-backed securities and potentially subject the Company to concentrations of credit risk. The Company has adopted investment guidelines that limit the amounts the Company may invest in any one type of investment and requires all investments held by the Company to be highly rated, thereby reducing credit risk exposure.

Research and Development Expenses

Research and development costs consist primarily of external costs related to clinical development, contract manufacturing and discovery as well as personnel costs. The Company estimates preclinical and clinical study and research expenses based on the services performed, pursuant to contracts with research institutions that conduct and manage nonclinical and clinical studies and research services on its behalf. The Company records the costs of research and development activities based upon the estimated amount of services provided but not yet invoiced and includes these costs in accrued liabilities in the Condensed Consolidated Balance Sheets. These costs are a component of the Company's research and development expenses. The Company accrues for these costs based on factors such as estimates of the work completed and in accordance with agreements established with its third-party service providers under the service agreements. The Company makes significant judgments and estimates in determining the accrued liabilities balance in each reporting period. As actual costs become known, the Company adjusts its accrued liabilities.

Government Assistance Tax Credits

The Coronavirus Aid, Relief, and Economic Security Act (the "CARES Act") provided refundable employee retention credits ("ERC"), which are used to offset payroll tax liabilities. During the three months ending June 30, 2023, the Company determined that it qualified for an ERC in the amount of \$0.6 million related to labor costs recognized during 2020 and 2021 and filed its amended employment tax returns to claim this credit. The entire amount of \$0.6 million is included in prepaid expenses and other current assets in the Company's Condensed Consolidated Balance Sheet as of June 30, 2023. The Company has recorded \$0.4 million of the offset of this receivable as a reduction to research and development expense and \$0.2 million as a reduction to general and administrative expense in the accompanying Condensed Consolidated Statement of Operations and Comprehensive Loss for the three months ended June 30, 2023. In August 2023, prior to the filing of this Quarterly Report on Form 10-Q, the Company has received all \$0.6 million of refunds.

Net Loss per Share

Basic net loss per share is computed by dividing the net loss by the weighted-average number of shares of common stock outstanding during the period. Diluted net loss per share is computed by dividing the net loss by the weighted-average number of shares of common stock together with the number of additional shares of common stock that would have been outstanding if all potentially dilutive shares of common stock had been issued. The Company included the weighted-average number of pre-funded warrants issued in its private placement in the number of outstanding shares for calculating basic and diluted net loss per share because the shares issuable upon exercise of the pre-funded warrants will be issued for little to no consideration. The following table sets forth the computation of basic and diluted net loss per share during the periods presented (in thousands, except share and per share amounts):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
Numerator:				
Net loss	\$ (3,922)	\$ (11,284)	\$ (9,956)	\$ (26,148)
Denominator:				
Weighted-average shares of common stock issued and outstanding	3,116,798	4,025,489	3,407,989	4,025,489
Weighted-average pre-funded warrants outstanding	3,090,909	—	2,937,217	—
Weighted-average shares used to calculate net loss per common share, basic and diluted	6,207,707	4,025,489	6,345,206	4,025,489
Net loss per common stock, basic and diluted	<u>\$ (0.63)</u>	<u>\$ (2.80)</u>	<u>\$ (1.57)</u>	<u>\$ (6.50)</u>

The following outstanding shares of potentially dilutive securities have been excluded from diluted net loss per common share for the periods presented, because their inclusion would be anti-dilutive:

	Six Months Ended June 30,	
	2023	2022
Stock options to purchase common stock	494,716	365,417
Restricted stock units	99,807	—
Total	<u>594,523</u>	<u>365,417</u>

Comprehensive Loss

The Company's comprehensive loss is currently comprised of changes in unrealized loss on available-for-sale securities.

Segment Reporting

Operating segments are identified as components of an enterprise about which separate discrete financial information is available for evaluation by the chief operating decision-maker in making decisions regarding resource allocation and assessing performance. The Company views its operations and manages its business in one operating segment.

Emerging Growth Company Status

The Company is an emerging growth company (“EGC”), as defined in the Jumpstart Our Business Startups Act of 2012 (the “JOBS Act”). Under the JOBS Act, emerging growth companies can delay adopting new or revised accounting standards issued subsequent to the enactment of the JOBS Act until such time as those standards apply to private companies. The Company has elected to use this extended transition period for complying with new or revised accounting standards that have different effective dates for public and private companies until the earlier of the date that it (i) is no longer an EGC or (ii) affirmatively and irrevocably opts out of the extended transition period provided in the JOBS Act. As a result, these condensed consolidated financial statements may not be comparable to companies that comply with the new or revised accounting pronouncements as of public company effective dates.

Recently Adopted Accounting Pronouncements

In June 2016, the Financial Accounting Standards Board (“FASB”) issued ASU 2016-23, which requires an allowance for expected credit losses on financial assets be recognized as early as day one of the instrument. This ASU departs from the incurred loss model which means the probability threshold is removed. It considers more forward-looking information and requires the entity to estimate its credit losses as far as it can reasonably estimate. The ASU was effective for fiscal years beginning after December 15, 2019 for public business entities that are U.S. Securities and Exchange Commission (“SEC”) filers, excluding entities eligible to be smaller reporting companies (“SRC”). For all other public business entities, including SRC, the ASU is effective for fiscal years beginning after December 15, 2022, including interim periods within those fiscal years. The Company’s adoption of ASU 2016-13 as of January 1, 2023 did not have a material impact on the condensed consolidated financial statements and accompanying notes.

3. Fair Value Measurement

Financial assets and liabilities are recorded at fair value on a recurring basis in the Condensed Consolidated Balance Sheets. The carrying values of the Company’s financial assets and liabilities, including cash and cash equivalents, prepaids and other current assets, accounts payable and accrued expenses approximate their fair value due to the short-term maturity of these instruments. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability (an exit price) in an orderly transaction between market participants at the reporting date. Assets and liabilities recorded at fair value in the condensed consolidated financial statements are categorized based upon the level of judgment associated with the inputs used to measure their fair value. Hierarchical levels are directly related to the amount of subjectivity with the inputs to the valuation of these assets or liabilities as follows:

Level 1—Observable inputs such as unadjusted, quoted prices in active markets for identical assets or liabilities at the measurement date;

Level 2—Inputs (other than quoted prices included in Level 1) that are either directly or indirectly observable inputs for similar assets or liabilities. These include quoted prices for identical or similar assets or liabilities in active markets and quoted prices for identical or similar assets of liabilities in markets that are not active;

Level 3—Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

The following table presents information about the Company’s financial assets measured at fair value on a recurring basis and indicates the level of the fair value hierarchy utilized to determine such fair values as of June 30, 2023 (in thousands):

	June 30, 2023			Aggregate Fair Value
	Level 1	Level 2	Level 3	
Assets:				
Money market fund	\$ 41,000	\$ —	\$ —	\$ 41,000
Fixed income securities	—	407	—	407
Asset backed securities	—	280	—	280
Total assets	\$ 41,000	\$ 687	\$ —	\$ 41,687

The following table presents information about the Company's financial assets and liabilities measured at fair value on a recurring basis and indicates the level of the fair value hierarchy utilized to determine such fair values as of December 31, 2022 (in thousands):

	December 31, 2022			
	Level 1	Level 2	Level 3	Aggregate Fair Value
Assets:				
U.S. government treasury securities	\$ 25,442	\$ —	\$ —	\$ 25,442
Fixed income securities	—	6,639	—	6,639
Asset backed securities	—	1,123	—	1,123
Total assets	\$ 25,442	\$ 7,762	\$ —	\$ 33,204

The contractual maturities of available-for-sale securities as of June 30, 2023 are as follows (in thousands):

Within one year	\$ 407
Within one to five years	280
Total contractual maturities	\$ 687

The Company's financial instruments consist of Level 1 and Level 2 assets. The Company values its Level 1 assets based on quoted prices in active markets for identical instruments. Level 1 assets consist primarily of highly liquid money market funds and U.S. government treasury securities that are included in cash equivalents. The Company values its Level 2 assets consisting of fixed income securities and asset backed securities with the help of a third-party pricing service using quoted market prices for similar instruments or nonbinding market prices that are corroborated by observable market data. The Company uses such pricing data as the primary input, to which no material adjustments have been made during the periods presented, to make its determination and assessments as to the ultimate valuation of these assets. The fair values of these instruments approximate amortized cost.

There were no transfers into or out of Level 3 securities during the six months ended June 30, 2023.

4. Asset Purchase and Redemption Agreement

In February 2023, the Company entered into an Asset Purchase and Redemption Agreement ("Purchase Agreement") with Dr. Bassaganya-Riera, a related party who is the former chief executive officer of the Company and a greater than 5% owner of the Company's stock at the time of the transaction, Raquel Hontecillas and certain other stockholders (the "Purchasers"), whereby the Purchasers acquired (i) all of the Company's right, title and interest in omilancor, LABP-104 and LABP-111 and any such derivatives and analogs that target LANCL proteins (together the "Acquired Compounds"), (ii) a worldwide, perpetual, irrevocable, fully-paid up, royalty-free, exclusive, sublicensable and transferable license grant under the intellectual property rights retained by the Company and necessary or useful for the development, manufacture and commercialization of the Acquired Compounds, (iii) a royalty agreement providing, among other things, for the payment by the Company to the Purchasers of a royalty of 2% of all net sales by the Company of any products containing certain compounds that the Company retained following the closing under the Purchase Agreement and (iv) \$3,000,000 in cash in exchange for (x) 908,644 shares of common stock of the Company held by the Purchasers (the "Purchaser Shares") and (y) a royalty agreement providing, among other things, for the payment by the Purchasers to the Company a royalty of 6% of all net sales by the Purchasers of any products containing any of the Acquired Compounds in consideration for the acquired intellectual property rights.

The impact of this transaction resulted in a \$3.0 million reduction of equity for the repurchase and retirement of the Purchaser Shares. There was no value assigned or recorded to the potential royalty consideration to be received or paid as such values were determined to be insignificant.

5. Balance Sheet Components

Accrued Liabilities

Accrued liabilities consist of the following:

	June 30, 2023	December 31, 2022
Accrued research and development	\$ 983	\$ 1,222
Accrued general and administrative	199	271
Accrued payroll and employee benefits	804	1,194
Total accrued liabilities	\$ 1,986	\$ 2,687

6. Equity and Stock-Based Compensation

Securities Purchase Agreement

In January 2023, the Company entered into a securities purchase agreement (the “Securities Purchase Agreement”) with the institutional accredited investors named therein (the “Investors”), pursuant to which the Company issued and sold to the Investors in a private placement (the “Private Placement”) pre-funded warrants (the “Pre-Funded Warrants”) to purchase an aggregate of 3,090,909 shares (the “Warrant Shares”) of the Company’s common stock. Each Pre-Funded Warrant has an exercise price of \$0.10 per Warrant Share. The purchase price per Pre-Funded Warrant was \$5.40. The Company received net proceeds of \$16.6 million in the Private Placement, after deducting \$0.1 million of offering expenses.

The Pre-Funded Warrants issued in the Private Placement provide that the holder of the Pre-Funded Warrants will not have the right to exercise any portion of its Pre-Funded Warrants if such holder, together with its affiliates and any other persons whose beneficial ownership of common stock would be aggregated with the holder for purposes of Section 13(d) or Section 16 of the Securities Exchange Act of 1934, as amended, would beneficially own in excess of 35% of the number of shares of common stock outstanding immediately after giving effect to such exercise. The Warrant Shares will also be subject to certain registration rights under the Company’s Amended and Restated Investors’ Rights Agreement. As of June 30, 2023, none of the Pre-Funded Warrants have been exercised.

Treasury Stock

In February 2023, in connection with entering into the Purchase Agreement with its founder, a related party who is the former chief executive officer of the Company and a greater than 5% owner of the Company’s common stock at the time of the transaction, and other stockholders, the Company repurchased 908,644 shares of common stock for an aggregate price of \$3.0 million. The repurchased common stock was subsequently retired in March 2023. The Company recorded the shares repurchased using the cost method.

2019 Equity Incentive Plan

In December 2019, the board of directors of the Company (the “Board”) adopted the 2019 Equity Incentive Plan (the “2019 Plan”). The 2019 Plan provides for the grant of share-based awards, including stock options and restricted stock units, to employees, directors and non-employee service providers of the Company. The number of shares of common stock reserved for issuance under the 2019 Plan automatically increases on January 1 of each calendar year, starting on January 1, 2020 and continuing through January 1, 2029, in an amount equal to the least of (i) 5% of the total number of shares of the Company’s capital stock issued and outstanding on the last day of the calendar month before the date of each automatic increase; (ii) 100,000 shares; or (iii) a lesser number of shares determined by the Company’s board of directors. Subject to this provision, the Company added 182,490 shares available for grant to the 2019 Plan effective January 1, 2023. As of June 30, 2023, there were approximately 610,959 shares available for future grants under the 2019 Plan.

2021 Employee Stock Purchase Plan

In January 2021, the Board adopted the 2021 Employee Stock Purchase Plan (the “2021 ESPP”). The purpose of the 2021 ESPP is to secure the services of new employees, to retain the services of existing employees and to provide incentives for such individuals to exert maximum efforts toward the Company’s success. The ESPP is intended to qualify as an “employee stock purchase plan” within the meaning of Section 423 of the Code for U.S. employees. The number of shares of common stock reserved for issuance under the 2021 ESPP automatically increases on January 1 of each calendar year, starting on January 1, 2022 and continuing through January 1, 2031, in an amount equal to the lesser of (i) 1% of the total number of shares of the Company’s capital stock issued and outstanding on the last day of the calendar month before the date of each automatic increase; or (ii) a lesser number of shares determined by the Board. Subject to this provision, the Company added 40,254 shares available for grant to the 2021 ESPP effective January 1, 2023. As of June 30, 2023, there were approximately 119,379 shares available for future grants under the 2021 ESPP. As of June 30, 2023, no shares of common stock had been purchased under the 2021 ESPP.

2022 Inducement Plan

In March 2022, the Board adopted the 2022 Inducement Plan. The 2022 Inducement Plan is a non-stockholder approved stock plan under which the Company may grant equity awards to induce highly-qualified prospective officers and employees who are not currently employed by the Company to accept employment and provide them with a proprietary interest in the Company. The Company intends that the 2022 Inducement Plan be reserved for persons to whom the Company may issue securities without stockholder approval as an inducement pursuant to Nasdaq Marketplace Rule 5635(c)(4). The number of shares of common stock reserved for issuance under the 2022 Inducement Plan was initially determined to be 100,000 shares. As of June 30, 2023, there were 100,000 shares available for future grants under the 2022 Inducement Plan.

Stock Option Awards

The weighted average fair value per share of options to purchase common stock granted was \$3.83 and \$9.10 for the six months ended June 30, 2023 and 2022, respectively.

At June 30, 2023, the total compensation cost related to unvested stock-based awards granted under the 2019 Plan but not yet recognized was approximately \$2.0 million, which is expected to be recognized over a weighted-average period of approximately 3.1 years.

Restricted Stock Units

At June 30, 2023, the total compensation cost related to unvested restricted stock units granted under the 2019 Plan but not yet recognized was approximately \$0.3 million, which is expected to be recognized over a weighted-average period of approximately 2.7 years.

The following table summarizes stock-based compensation expense, which was included in the Condensed Consolidated Statements of Operations and Comprehensive Loss as follows (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
Research and development	\$ 91	\$ 120	\$ 158	\$ 550
General and administrative	163	514	320	1,025
Total stock-based compensation expense	\$ 254	\$ 634	\$ 478	\$ 1,575

7. Commitments and Contingencies

Liabilities for loss contingencies arising from claims, assessments, litigation, fines and penalties and other sources are recorded when it is probable that a liability has been incurred and the amount can be reasonably estimated. The Company believes there is no litigation pending or loss contingencies that could have, either individually or in the aggregate, a material impact on the Company's financial statements.

The Company enters into contracts in the normal course of business with third-party contract organizations for clinical trials, preclinical studies, manufacturing and other services and products for operating purposes. These contracts generally provide for termination following a certain period after notice and therefore the Company believes that its non-cancelable obligations under these agreements are not material.

Leases

The Company adopted ASC 842 on January 1, 2022 and accordingly, recognized operating lease right-of-use ("ROU") assets and operating lease liabilities based on the present value of the future minimum lease payments over the lease terms at the adoption date, using the Company's assumed incremental borrowing rate of 8%. The Company amortized the operating lease ROU assets and operating lease liabilities over the applicable lease term.

The Company leased office space for its corporate headquarters located in Blacksburg, Virginia, under a non-cancelable operating lease which expired in May 2022. In August 2021, the Company entered into a three-year lease for an additional facility in Blacksburg, Virginia that was terminated in March 2022.

In connection with the termination of the lease in March 2022, the Company made a one-time cash payment of \$0.2 million and included assets with a net book value of \$0.1 million, resulting in a loss on the termination of the lease of \$0.3 million, which is included in general and administrative costs in the accompanying Condensed Consolidated Statements of Operations and Comprehensive Loss. In addition, upon termination of the lease in March 2022, operating lease ROU assets and operating lease liabilities were reduced by approximately \$0.7 million.

Rent expense was \$0 and \$27,000 for the three months ended June 30, 2023 and 2022, respectively and \$0 and \$0.1 million for the six months ended June 30, 2023 and 2022, respectively.

Retained Compounds Royalty Agreement

Pursuant to the terms of the Purchase Agreement entered into by the Company and the Purchasers in February 2023, the Company entered into a royalty agreement whereby the Purchasers are eligible to receive a 2% royalty of all net sales by the Company of any products containing certain compounds that the Company retained following the closing under the Purchase Agreement ("Retained Compounds Royalty Agreement"). The Company recognizes such royalty payment obligations when such payments are probable and reasonably estimable. Due to the uncertainty related to the ongoing research and development activities, obtaining regulatory approval and achieving successful commercialization to which net sales could be derived, the Company has not recognized a royalty obligation as of and for the six months ended June 30, 2023.

8. License and Collaboration Agreement

In May 2021, the Company entered into an exclusive license and collaboration agreement (the “LianBio Agreement”) with LianBio Respiratory Limited (“Lian”). Lian is a related party to the Company as a result of an affiliation of a member of the Company’s board of directors at the time the LianBio Agreement was executed. Pursuant to the LianBio Agreement, the Company delivered to Lian an exclusive license and the know-how (the “License”) to develop, manufacture and commercialize omilancor and NX-13 (the “Products”) in the territory comprising the People’s Republic of China (“PRC”), Hong Kong, Macau, Taiwan, Cambodia, Indonesia, Myanmar, Philippines, Singapore, South Korea, Thailand and Vietnam (the “Territory”). Lian will bear (i) all costs and expenses for any development or commercialization of the Products in the Territory and (ii) all costs and fees associated with applying for regulatory approval of the Products in the Territory. The Company received a non-refundable payment of \$18.0 million upon execution of the LianBio Agreement. In February 2023, the Company amended the LianBio Agreement to no longer cover omilancor. Subsequent to the amendment, the Company is eligible to receive development milestone payments of up to \$40.0 million as well as sales milestone payments of up to \$105.0 million relating to the development of NX-13. The Company is also eligible to receive tiered low-double-digit royalties based on future net sales of NX-13 in the Territory, subject to reductions in specified circumstances.

In accordance with the LianBio Agreement, the Company agreed to supply to Lian all clinical and commercial requirements of Products. The terms of the agreement do not provide for either (i) an option to Lian to purchase Products from the Company at a discount from the standalone selling price or (ii) minimum purchase quantities. In addition, the Company and Lian formed a Joint Steering Committee (“JSC”) to provide oversight to the activities performed under the LianBio Agreement; however, the substance of the Company’s participation in the JSC does not represent an additional promised service, but rather, a right of the Company to protect its own interests in the arrangement.

The Company concluded that Lian meets the definition of a customer because the Company is delivering intellectual property and other services in which the parties are not jointly sharing the risks and rewards. Therefore, the Company concluded that the promises summarized above represent transactions with a customer within the scope of ASC 606. Given that Lian is not obligated to purchase any minimum amount or quantities of Products, the supply of Products for clinical and commercial purposes was determined to be an option for Lian, rather than a performance obligation of the Company at contract inception and will be accounted for if and when exercised. The Company also determined that Lian’s option to purchase Products does not create a material right as the expected pricing is not at a discount. At contract inception and through June 30, 2023, the Company determined that the contract contains a single performance obligation to deliver the License, which represents functional intellectual property given the functionality of the License is not expected to change substantially as a result of the Company’s ongoing activities.

The Company determined that the upfront fixed payment of \$18.0 million is the initial transaction price. The potential development milestone payments that the Company is eligible to receive upon the successful achievement of certain regulatory approvals or activities were excluded from the transaction price, as the milestone amounts were fully constrained based on the probability of achievement. The royalties and sales milestone payments are excluded from the transaction price under the sales- or usage-based royalty exception of ASC 606. The Company will reevaluate the transaction price, including all constrained amounts, at the end of each reporting period and as uncertain events are resolved or other changes in circumstances occur, and the Company will adjust its estimate of the transaction price as necessary. The Company will recognize the royalties and sales milestone payments as revenue when the associated sales occur, and relevant sales-based thresholds are met. The Company assessed the arrangement with Lian and concluded that a significant financing component does not exist. As of June 30, 2021, the Company had completed the transfer of the License and know-how necessary and, as such, recognized the full \$18.0 million upfront payment as revenue.

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

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our unaudited condensed consolidated financial statements and related notes included in this Quarterly Report on Form 10-Q and the audited consolidated financial statements and notes thereto as of December 31, 2022 and 2021 and for each of the two years in the period ended December 31, 2022 and the related Management’s Discussion and Analysis of Financial Condition and Results of Operations included in our Annual Report on Form 10-K filed with the Securities and Exchange Commission, or SEC, on March 23, 2023. Unless the context requires otherwise, references in this Quarterly Report on Form 10-Q to “the company,” “we,” “us,” and “our” refer to Landos Biopharma, Inc. together with its subsidiaries.

This report contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act, that involve substantial risks and uncertainties. In some cases, you can identify forward-looking statements by the words “may,” “might,” “will,” “could,” “would,” “should,” “expect,” “intend,” “plan,” “objective,” “anticipate,” “believe,” “estimate,” “predict,” “project,” “potential,” “continue” and “ongoing,” or the negative of these terms, or other comparable terminology intended to identify statements about the future. These statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to be materially different from the information expressed or implied by these forward-looking statements. You should refer to “Item 1A. Risk Factors” in our Annual Report on Form 10-K for the year ended December 31, 2022 and in “Item 1a. Risk Factors” below for a discussion of important factors that may cause our actual results to differ materially from those expressed or implied by our forward-looking statements.

Company Overview

We are a clinical-stage biopharmaceutical company focused on the development of novel, oral, once-daily therapeutics for patients with certain immunology diseases. Our core expertise is the development of compounds that target novel pathways at the interface of immunity and metabolism. Based on our understanding of the role that cellular metabolic pathways have on modulating inflammatory responses, we aim to inhibit these inflammatory responses by changing the metabolic processes in target cells. We believe the therapeutics we develop, if approved, could have a significant positive impact on the quality of life of patients suffering from immunology diseases.

Our current focus and lead candidate is NX-13, a novel, oral gut-selective NLRX1 agonist. We are developing NX-13 as a once-daily oral treatment for ulcerative colitis, or UC, that targets NOD-like receptor X1, or NLRX1, a mitochondria-associated receptor that has been associated with the modulation of inflammatory cytokines for UC. NX-13 is designed to target NLRX1 and induce anti-inflammatory effects in CD4+ T cells and other cells in the gastrointestinal tract.

We announced top-line results from our NX-13 Phase 1b trial in UC patients in August 2022. The data showed favorable safety and tolerability profiles across a range of doses, as well as signals of clinical improvement as soon as two weeks in patients’ symptoms and four weeks by endoscopy in exploratory endpoints. We believe that these early signals, as well as the data from long-term toxicology studies, support the potential of NX-13 as a new treatment for UC. We are continuing an in-depth analysis of the clinical, pharmacokinetic, or PK, and pharmacodynamic, or PD, data for NX-13. A preliminary analysis demonstrated promising signals of both target engagement and molecular dose response among the 250mg and 500mg immediate release, or IR, doses. In the second quarter of 2023, we initiated the NEXUS trial, which is a Phase 2 proof-of-concept clinical trial for NX-13 in patients with moderate to severe UC. The NEXUS trial is dose ranging, blinded, placebo-controlled and statistically powered. We have activated sites in the US and are actively recruiting and screening patients. We expect to report top-line data from this trial by the fourth quarter of 2024.

In addition to NX-13, we have discovered several preclinical product candidates, comprising the following:

- LABP-73, an oral, small molecule NLRX1 pathway agonist in development for the treatment of asthma and Chronic Obstructive Pulmonary Disease, or COPD,
- LABP-66, an oral, small molecule NLRX1 pathway agonist in development for the treatment of multiple sclerosis, or MS, and Alzheimer’s disease; and
- LABP-69, an oral, small molecule PLXDC2 pathway agonist in development for the treatment of diabetic nephropathy and rheumatoid arthritis, or RA.

In May 2023, our stockholders approved a reverse stock split at the annual meeting of stockholders, and subsequently, we effected a one-for-ten (1-for-10) reverse stock split, or the Reverse Stock Split, of our outstanding common stock and a corresponding reduction in the total number of authorized shares of our common stock from 200,000,000 to 20,000,000. All historical share and per share amounts reflected in this report have been adjusted to reflect the Reverse Stock Split.

In February 2023, we entered into an Asset Purchase and Redemption Agreement, or the Purchase Agreement, with Dr. Bassaganya-Riera, a related party who is our former chief executive officer and a greater than 5% owner of our common stock at the time of the transaction, Raquel Hontecillas and certain other stockholders, or together the Purchasers, whereby the Purchasers acquired (i) all of our right, title and interest in omilancor, LABP-104 and LABP-111 and any such derivatives and analogs that target LANCL proteins, or together the Acquired Compounds, (ii) a worldwide, perpetual, irrevocable, fully-paid up, royalty-free, exclusive, sublicensable and transferable license grant under the intellectual property rights retained by us and necessary or useful for the development, manufacture and commercialization of the Acquired Compounds, (iii) a royalty agreement providing, among other things, for the payment by us to the Purchasers of a royalty of 2% of all net sales by us of any products containing certain compounds that we retained following the closing under the Purchase Agreement and (iv) \$3,000,000 in cash in exchange for (x) 908,644 shares of our common stock held by the Purchasers and (y) a royalty agreement providing, among other things, for the payment by the Purchasers to us of a royalty of 6% of all net sales by the Purchasers of any products containing any of the Acquired Compounds in consideration for the acquired intellectual property rights.

In May 2021, we entered into an exclusive collaboration and license agreement, or the LianBio Agreement, with LianBio Respiratory Limited, or Lian, pursuant to which we granted Lian an exclusive license, or the License, to develop, manufacture and commercialize NX-13 and omilancor. In February 2023, we amended the LianBio Agreement to no longer cover omilancor and developmental milestones events were amended to reflect the transfer of omilancor. Subsequent to the amendment, we are eligible to receive development milestone payments of up to \$40.0 million as well as sales milestone payments of up to \$105.0 million. We are also eligible to receive tiered low-double-digit royalties based on future net sales of NX-13 in the territory comprising the People's Republic of China, Hong Kong, Macau, Taiwan, Cambodia, Indonesia, Myanmar, Philippines, Singapore, South Korea, Thailand and Vietnam, subject to reductions in specified circumstances.

We have a limited operating history. Since inception, our operations have focused on developing our clinical and preclinical product candidates, organizing and staffing our company, business planning, raising capital, establishing our intellectual property portfolio and conducting clinical trials and preclinical studies. We do not have any product candidates approved for sale and have not generated any revenue from product sales.

Since our inception in 2017, we have funded operations through the issuance of convertible preferred stock and convertible promissory notes, through proceeds from our initial public offering, or IPO, through the upfront payment from a license and collaboration agreement with a related party and through the sale of pre-funded warrants in a private placement. As of June 30, 2023, we had an accumulated deficit of \$143.4 million and we expect to incur substantial operating losses for at least the next several years. As such, we will need to raise additional capital to initiate and complete our ongoing and planned clinical trials, to continue and expand our research and development operations that support our ongoing and planned development and clinical and regulatory activities, and to adequately prepare for commercialization of our product candidates that may achieve regulatory approval in the future. As of June 30, 2023, we had cash, cash equivalents and marketable securities of \$44.7 million. We believe that our existing cash, cash equivalents and marketable securities as of June 30, 2023 will be sufficient to fund our operating expenses and capital requirements into the first half of 2025. We anticipate that our expenses may increase significantly in connection with our ongoing activities, as we:

- conduct our ongoing and planned clinical trials of NX-13;
- pursue regulatory approval of our product candidates;
- seek to discover and develop additional clinical and preclinical product candidates;
- scale up our clinical and regulatory capabilities;
- establish a commercialization infrastructure and scale up external manufacturing and distribution capabilities to commercialize any product candidates for which we may obtain regulatory approval;
- adapt our regulatory compliance efforts to incorporate requirements applicable to marketed products;
- maintain, expand and protect our intellectual property portfolio;
- hire additional clinical, manufacturing and scientific personnel;
- add operational, financial and management information systems and personnel, including personnel to support our product development and planned future commercialization efforts; and
- incur additional legal, accounting and other expenses in operating as a public company.

Components of our Results of Operations

Research and Development Expenses

Research and development expenses consist primarily of costs incurred in connection with our research activities, including our discovery efforts and the development of our product candidates, and include:

- salaries, benefits, stock-based compensation and other related costs for personnel engaged in research and development functions;
- expenses incurred under agreements with third parties, including contract research organizations, or CROs, and other third parties that conduct research, preclinical activities and clinical trials on our behalf, as well as contract manufacturing organizations, or CMOs, that manufacture drug material for use in our clinical trials and preclinical studies;
- costs of outside consultants, including their fees and related travel expenses;
- the costs of laboratory supplies and acquiring, developing and manufacturing preclinical and clinical trial supplies; and
- allocated expenses for rent and maintenance of facilities and other operating costs.

We expense research and development costs as incurred. We track external development costs by product candidate or development program, but we do not allocate personnel costs or certain other costs to specific development programs or product candidates.

Research and development activities are central to our business model. Product candidates in later stages of clinical development generally have a higher development cost than those in earlier stages of clinical development, primarily due to the increased size and duration of later-stage clinical trials. We expect that our research and development expenses will be lower in 2023 relative to 2022 as a result of wind down of previous clinical trial activities. However, in the long term, we expect that they will increase and will comprise a larger percentage of our total expenses as we progress and complete our ongoing clinical trials, initiate new clinical trials, continue to discover and develop additional product candidates and prepare regulatory filings for any product candidates that successfully complete clinical trials.

The successful development of our product candidates is highly uncertain. At this time, we cannot determine with certainty the duration and costs of our existing and future clinical trials of our product candidates or any other product candidate we may develop or if, when, or to what extent we will generate revenue from the potential commercialization and sale of any product candidate for which we obtain marketing approval. We may never succeed in obtaining marketing approval for any product candidate. The duration, costs and timing of clinical trials and development of our product candidates and any other product candidate we may develop in the future will depend on a variety of factors, including:

- per patient trial costs;
- the number of patients who enroll in each trial;
- the number of trials required for approval;
- the number of sites included in the trials;
- the countries in which the trials are conducted;
- the length of time required to enroll eligible patients;
- the drop-out or discontinuation rates of patients;
- potential additional safety monitoring requested by regulatory agencies;
- the duration of patient participation in the trials and follow-up;
- our ability to secure adequate supply of our product candidates for our trials;
- the phase of development of the product candidate; and
- the efficacy and safety profile of the product candidate.

Our expenditures are subject to additional uncertainties, and we may never succeed in achieving regulatory approval for our product candidates. We may obtain unexpected results from our clinical trials. We may elect to discontinue, delay or modify clinical trials of our product candidates. A change in the outcome of any of these variables with respect to the development of a product candidate could mean a significant change in the costs and timing associated with the development of that product candidate. For example, if the U.S. Food and Drug Administration, or FDA, or another regulatory authority were to require us to conduct clinical trials beyond those that we anticipate will be required for the completion of clinical development of a product candidate, or if we experience significant delays in our clinical trials due to patient enrollment or other reasons, we would be required to expend significant additional financial resources and time on the completion of clinical development.

General and Administrative Expenses

General and administrative expenses consist primarily of salaries and other related costs for personnel in our executive, finance, business development and administrative functions. General and administrative expenses also include legal fees relating to intellectual property and corporate matters, professional fees for accounting, auditing, tax and consulting services, insurance costs, travel expenses and facility-related expenses, which include direct depreciation costs and allocated expenses for rent and maintenance of facilities and other operating costs.

We expect that our general and administrative expenses will be slightly lower in 2023 relative to 2022 as we focus our resources toward the development of NX-13. However, in the long term, we expect that they will increase as we increase our personnel headcount to support our expanded infrastructure, including the development of a commercialization infrastructure for any product candidates for which we may obtain regulatory approval. Our expenditures are subject to uncertainties, including the terms and timing of regulatory approvals, and the expense of filing, prosecuting, defending and enforcing any patent claims or other intellectual property rights.

Interest and Other Income, net

Interest and other income, net, primarily consists of grant income received under a grant agreement with the National Institutes of Health, or NIH, and interest income received from available-for-sale marketable securities. We were awarded a grant by the NIH for a phase 2 proof-of-concept efficacy study of omilancor in Crohn's disease patients. The grant award provided for reimbursement of actual, allowable costs incurred. In connection with this grant, we may be subject to audits by the NIH. As part of an audit, the NIH may review our performance, cost structures and compliance with applicable laws, regulations, policies and standards and the terms and conditions of the grant. If any of our expenditures are found to be unallowable or allocated improperly, we may be required to repay funds already disbursed. Accordingly, an audit could result in a material adjustment to our results of operations and financial condition.

Results of Operations

Comparison of the three and six months ended June 30, 2023 and 2022

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
Operating expenses:				
Research and development	\$ 2,463	\$ 6,604	\$ 5,789	\$ 17,404
General and administrative	1,976	4,662	5,129	8,815
Total operating expenses	4,439	11,266	10,918	26,219
Loss from operations	(4,439)	(11,266)	(10,918)	(26,219)
Other income:				
(Loss) gain from foreign exchange	(40)	25	(44)	26
Interest and other income (expense), net	557	(43)	1,006	45
Other income (expense), net	517	(18)	962	71
Net loss	<u>\$ (3,922)</u>	<u>\$ (11,284)</u>	<u>\$ (9,956)</u>	<u>\$ (26,148)</u>

Research and Development Expenses

Research and development expenses were \$2.5 million for the three months ended June 30, 2023 compared to \$6.6 million for the three months ended June 30, 2022. The decrease of \$4.1 million was primarily attributed to reduced clinical activities due to the wind down of the omilancor and LABP-104 programs, which were transferred in February 2023 pursuant to the Purchase Agreement, and also due to reduced NX-13 Phase 1b clinical trial costs, partially offset by the initiation of the NEXUS trial. Additionally, there were decreases in compensation costs, consulting costs and depreciation expense.

Research and development expenses were \$5.8 million for the six months ended June 30, 2023 compared to \$17.4 million for the six months ended June 30, 2022. The decrease of \$11.6 million was primarily attributed to reduced clinical activities due to the wind down of the omilancor and LABP-104 programs, which were transferred in February 2023 pursuant to the Purchase Agreement, and also due to reduced NX-13 Phase 1b clinical trial costs, partially offset by the initiation of the NEXUS trial. Additionally, there were decreases in compensation costs, consulting costs and depreciation expense.

The following table summarizes our research and development expenses by product candidate for the three and six months ended June 30, 2023 and 2022 (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
External costs by clinical program:				
Omilancor	\$ (3)	\$ 997	\$ (58)	\$ 6,248
NX-13	1,385	2,466	3,137	4,347
LABP-104	(4)	517	17	1,290
Total external costs by clinical program:	1,378	3,980	3,096	11,885
Compensation	777	1,001	2,057	2,537
Other	308	1,623	636	2,982
Total research and development expenses	\$ 2,463	\$ 6,604	\$ 5,789	\$ 17,404

General and Administrative Expenses

General and administrative expenses were \$2.0 million for the three months ended June 30, 2023 compared to \$4.7 million for the three months ended June 30, 2022. The decrease of \$2.7 million was primarily attributable to a decrease in compensation costs, recruiting costs and Directors and Officers, or D&O, insurance.

General and administrative expenses were \$5.1 million for the six months ended June 30, 2023 compared to \$8.8 million for the six months ended June 30, 2022. The decrease of \$3.7 million was primarily attributable to a decrease in compensation costs, recruiting and consulting costs, D&O insurance, and a one-time charge incurred in connection with a lease termination in the prior year.

Liquidity and Capital Resources

Since our inception, we have incurred significant operating losses and negative cash flows from our operations. We expect to incur significant expenses and operating losses for the foreseeable future as we advance the preclinical and clinical development of our research programs and product candidates. As a result, we will need additional capital to fund our operations, which we may obtain from additional equity or debt financings, collaborations, licensing arrangements or other sources.

We do not currently have any approved products and have never generated any revenue from product sales. To date, we have financed our operations primarily through the issuance of convertible preferred stock and convertible promissory notes, proceeds from our IPO, the upfront payment from the LianBio Agreement and the sale of pre-funded warrants in a private placement.

In March 2022, we filed a shelf registration statement on Form S-3, or the 2022 Shelf Registration Statement, with the SEC. The 2022 Shelf Registration Statement became effective in August 2022. The 2022 Shelf Registration Statement permits the offering, issuance and sale by us of up to a maximum aggregate offering price of \$200.0 million of common stock, preferred stock, debt securities and warrants in one or more offerings and in any combination. As of June 30, 2023, we had \$200.0 million of common stock remaining that can be sold under the 2022 Shelf Registration Statement, although this amount will be limited for as long as we are subject to General Instruction I.B.6 of Form S-3, which limits the amount of funds we can raise through primary public offerings of securities in any twelve-month period using a registration statement on Form S-3 to one-third of the aggregate market value of the shares of our common stock held by non-affiliates. Therefore, we will be limited in the amount of proceeds we are able to raise by selling shares of our common stock using Form S-3, including the 2022 Shelf Registration Statement, until such time as our public float held by non-affiliates exceeds \$75.0 million.

In January 2023, we entered into a securities purchase agreement, or the Securities Purchase Agreement, with the institutional accredited investors named therein, or the Investors, pursuant to which we issued and sold to the Investors in a private placement, or the Private Placement, pre-funded warrants, or the Pre-Funded Warrants, to purchase an aggregate of 3,090,909 shares, or the Warrant Shares, of our common stock. Each Pre-Funded Warrant has an exercise price of \$0.10 per Warrant Share. The purchase price per Pre-Funded Warrant was \$5.40. The Pre-Funded Warrants issued in the Private Placement are exercisable at any time but provide that the holder of the Pre-Funded Warrants will not have the right to exercise any portion of its Pre-Funded Warrants if such holder, together with its affiliates and any other persons whose beneficial ownership of common stock would be aggregated with the holder for purposes of Section 13(d) or Section 16 of the Securities Exchange Act of 1934, as amended, would beneficially own in excess of 35% of the number of shares of common stock outstanding immediately after giving effect to such exercise. The Warrant Shares will also be subject to certain registration rights under our Amended and Restated Investors' Rights Agreement. We received net proceeds of \$16.6 million in the Private Placement, after deducting \$0.1 million of offering expenses.

As of June 30, 2023, we had approximately \$44.7 million in cash, cash equivalents and marketable securities and an accumulated deficit of \$143.4 million. We had no indebtedness as of June 30, 2023.

The following table summarizes our sources and uses of cash for each of the periods set forth below (in thousands):

	Six Months Ended June 30,	
	2023	2022
Net cash used in operating activities	\$ (13,280)	\$ (34,499)
Net cash provided by investing activities	7,078	45,377
Net cash provided by financing activities	13,567	—
Net change in cash and cash equivalents	\$ 7,365	\$ 10,878

Operating Activities

During the six months ended June 30, 2023, we used cash in operating activities of \$13.3 million, reflecting a net loss of \$10.0 million and a net change of \$3.8 million in our operating assets and liabilities, partially offset by non-cash charges of \$0.5 million. The non-cash charges consist primarily of stock-based compensation expense. The net change in our operating assets and liabilities was primarily due to a decrease in accounts payable and other liabilities, as well as an increase in prepaid expenses and other assets.

During the six months ended June 30, 2022, we used cash in operating activities of \$34.5 million, reflecting a net loss of \$26.1 million, partially offset by non-cash charges of \$2.8 million and a net change of \$11.2 million in our operating assets and liabilities. The non-cash charges consist primarily of \$1.6 million of stock-based compensation expense, \$0.6 million of depreciation expense and \$0.5 million related to the amortization of the premium on investments. The net change in our operating assets and liabilities was primarily due to a decrease in accounts payable and other liabilities and an increase in prepaid expenses and other current assets.

Investing Activities

Net cash provided by investing activities during the six months ended June 30, 2023 was \$7.1 million, consisting primarily of proceeds from sales and maturities of marketable securities. Net cash provided by investing activities for the six months ended June 30, 2022 was \$45.4 million, consisting of proceeds from sales and maturities of marketable securities, partially offset by purchases of available-for-sale marketable securities.

Financing Activities

Net cash provided by financing activities during the six months ended June 30, 2023 of \$13.6 million was primarily related to net proceeds received from the issuance of pre-funded warrants for the purchase of common stock, partially offset by the repurchase and retirement of common stock.

Funding Requirements

To date, we have not generated any revenues from the commercial sale of approved drug products, and we do not expect to generate substantial revenue for at least the next few years. If we fail to complete the development of our product candidates in a timely manner or fail to obtain their regulatory approval, our ability to generate future revenue will be compromised. We do not know when, or if, we will generate any revenue from our product candidates, and we do not expect to generate significant revenue unless and until we obtain regulatory approval of, and commercialize, our product candidates. Further, we do not know when, or if, we will generate any additional revenue under the LianBio Agreement or pursuant to the royalty rights under the Purchase Agreement as future payments are conditioned upon the achievement of development and commercialization milestones that are uncertain as of this date. We expect our expenses to proportionately increase in connection with our ongoing activities, particularly as we continue the research and development of, continue or initiate clinical trials of, and seek marketing approval for, our product candidates. In addition, if we obtain approval for any of our product candidates, we expect to incur significant commercialization expenses related to sales, marketing, manufacturing and distribution. We anticipate that we will need substantial additional funding in connection with our continuing operations. If we are unable to raise capital when needed or on attractive terms, we could be forced to delay, reduce or eliminate our research and development programs or future commercialization efforts.

Identifying potential product candidates and conducting preclinical studies and clinical trials is a time-consuming, expensive and uncertain process that takes many years to complete, and we may never generate the necessary data or results required to obtain marketing approval and achieve product sales. In addition, our product candidates, if approved, may not achieve commercial success. Our commercial revenues, if any, will be derived from sales of product candidates that we do not expect to be commercially available in the near term, if at all.

We believe that our existing cash, cash equivalents and marketable securities as of June 30, 2023 will be sufficient to fund our operating expenses and capital requirements into the first half of 2025. We have based these estimates on assumptions that may prove to be imprecise, and we could utilize our available capital resources sooner than we expect.

Because of the numerous risks and uncertainties associated with research, development and commercialization of pharmaceutical drugs, it is difficult to estimate with certainty the amount of our working capital requirements. Our future funding requirements will depend on many factors, including:

- the scope, progress, costs and results of our ongoing and planned clinical trials of NX-13;
- the scope, progress, costs and results of preclinical development, laboratory testing and clinical trials for any future product candidates we may decide to pursue;
- the extent to which we in-license or acquire rights to other products, product candidates or technologies;
- the costs and timing of process development and manufacturing scale-up activities associated with our product candidates and other programs as we advance them through preclinical and clinical development;
- the number and development requirements of other product candidates that we may pursue;
- the costs, timing and outcome of regulatory review of our product candidates;
- the costs and timing of future commercialization activities, including product manufacturing, marketing, sales and distribution for any of our product candidates for which we receive marketing approval;
- the revenue, if any, received from commercial sales of our product candidates for which we receive marketing approval;
- our ability to establish and maintain strategic collaborations, licensing or other agreements and the financial terms of such agreements; and
- the costs and timing of preparing, filing and prosecuting patent applications, maintaining and protecting our intellectual property rights and defending against any intellectual property-related claims.

Further, our operating results may change in the future, and we may need additional funds to meet operational needs and capital requirements associated with such operating plans.

Our future commercial revenue, if any, will be derived from sales of products that we do not expect to be commercially available for several years, if at all. Until such time, if ever, that we can generate product revenue sufficient to achieve profitability, we expect to finance our cash needs through a combination of equity offerings, debt financings, collaboration agreements, other third-party funding, strategic alliances, licensing arrangements and marketing and distribution arrangements. Adequate additional financing may not be available to us on acceptable terms, or at all. We currently have no credit facility or committed sources of capital. To the extent that we raise additional capital through the sale of equity or convertible debt securities, the ownership interest of our stockholders will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect the rights of existing stockholders. Pursuant to the Securities Purchase Agreement, the Investors are entitled to exercise the pre-funded warrants to purchase an aggregate of 3,090,909 shares of our common stock. If the Investors were to exercise their outstanding Pre-Funded Warrants, existing stockholders will recognize significant dilution. Debt financing and preferred equity financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. If we raise additional funds through other third-party funding, collaboration agreements, strategic alliances, licensing arrangements or marketing and distribution arrangements, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs or product candidates or grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds through equity or debt financings when needed, we may be required to delay, limit, reduce or terminate our product development or future commercialization efforts or grant rights to develop and market products or product candidates that we would otherwise prefer to develop and market ourselves.

Critical Accounting Policies and Significant Judgements and Estimates

Our management's discussion and analysis of financial condition and results of operations is based on our condensed consolidated financial statements, which have been prepared in accordance with generally accepted accounting principles in the U.S. The preparation of our condensed consolidated financial statements and related disclosures requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities, costs and expenses and the disclosure of contingent assets and liabilities in our condensed consolidated financial statements. We base our estimates on historical experience, known trends and events and various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. We evaluate our estimates and assumptions on an ongoing basis. Our actual results may differ from these estimates under different assumptions or conditions.

Our significant accounting policies are described in Note 1 to the consolidated financial statements included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2022. The accounting policies and estimates that are most critical to a full understanding and evaluation of our reported financial results are described in Management's Discussion and Analysis of Financial Condition and Results of Operations in Item 7 of our Annual Report on Form 10-K for the fiscal year ended December 31, 2022. There were no material changes to our critical accounting policies and estimates during the six months ended June 30, 2023.

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

We maintain “disclosure controls and procedures,” as defined in Rule 13a-15(e) and Rule 15d-15(e) under the Exchange Act that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC’s rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to our management, including our principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure.

Our management, with the participation of our Chief Executive Officer (our principal executive officer and principal financial officer), has evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act), as of the end of the period covered by this Quarterly Report. Based on such evaluation, our Chief Executive Officer has concluded that as of June 30, 2023, our disclosure controls and procedures were effective to provide reasonable assurance that the information required to be disclosed by us in this Quarterly Report was (a) reported within the time periods specified by SEC rules and regulations, and (b) communicated to our management, including our Chief Executive Officer, to allow timely decisions regarding any required disclosure.

Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting identified in management’s evaluation pursuant to Rules 13a-15(d) or 15d-15(d) of the Exchange Act during the quarter ended June 30, 2023 that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Inherent Limitations on Effectiveness of Internal Controls

In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable, not absolute, assurance of achieving the desired control objectives. In addition, the design of disclosure controls and procedures must reflect the fact that there are resource constraints and that management is required to apply judgment in evaluating the benefits of possible controls and procedures relative to their costs. Our management, including our Chief Executive Officer, believes that our disclosure controls and procedures and internal control 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 or our internal control over financial reporting will prevent all errors and all fraud.

PART II—OTHER INFORMATION

Item 1. Legal Proceedings

In the ordinary course of business, we may be involved in various legal or regulatory proceedings. We are not currently subject to any material legal or regulatory proceedings.

Item 1A. Risk Factors

There have been no material changes in the risk factors described in “Item 1A. Risk Factors” of our Annual Report on Form 10-K for the year ended December 31, 2022.

Item 6. Exhibits.

The exhibits listed on the Exhibit Index are either filed or furnished with this report or incorporated herein by reference.

Exhibit Number	Description
3.1	<u>Amended and Restated Certificate of Incorporation (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K (File No. 001-39971), filed with the Securities and Exchange Commission on May 30, 2023).</u>
3.2	<u>Amended and Restated Bylaws (incorporated by reference to Exhibit 3.4 to the Company's to the Company's Registration Statement on Form S-1 (File No. 333-252083), filed with the Securities and Exchange Commission on January 28, 2021).</u>
31.1*	<u>Certification of Principal Executive and 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.</u>
32.1*#	<u>Certification of Principal Executive and Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.</u>
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.

This certification is being furnished solely to accompany this Quarterly Report pursuant to 18 U.S.C. Section 1350, and is not being filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and is not to be incorporated by reference into any filing of the Company, whether made before or after the date hereof, regardless of any general incorporation language in such filing.

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.

Landos Biopharma, Inc.

Date: August 9, 2023

By: _____
/s/ Gregory Oakes
Gregory Oakes
President and Chief Executive Officer
(Principal Executive and Financial Officer)

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

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

- (1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company.

Landos Biopharma, Inc.

Date: August 9, 2023

By: _____
/s/ Gregory Oakes
Gregory Oakes
President and Chief Executive Officer
(Principal Executive and Financial Officer)
