UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

FORM 10-Q

(Mark One)

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

For the quarterly period ended September 30, 2022

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	**81-5085535**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
P.O. Box 11239 **Blacksburg, Virginia**	**24062**
(Address of principal executive offices)	**(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	☐	Accelerated filer	☐
Non-accelerated filer	☒	Smaller reporting company	☒
Emerging growth company	☒		

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

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

As of November 4, 2022, the registrant had 40,254,890 shares of common stock, $0.01 par value per share, outstanding.

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Item 1. Financial Statements. (Unaudited)

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

	September 30, 2022 (Unaudited)	December 31, 2021
Assets		
Current assets:		
Cash and cash equivalents	$ 28,880	$ 8,305
Marketable securities, available-for-sale	19,111	82,575
Prepaid expenses and other current assets	1,497	1,266
Total current assets	49,488	92,146
Property and equipment, net	—	707
Other assets	—	26
Total assets	$ 49,488	$ 92,879
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	$ 3,204	$ 12,908
Accrued liabilities	2,271	3,703
Total current liabilities	5,475	16,611
Total liabilities	5,475	16,611
Commitments and contingencies (Note 6)		
Stockholders' equity:		
Preferred stock, $0.01 par value; 10,000,000 shares authorized, no shares issued and outstanding as of September 30, 2022 and December 31, 2021	—	—
Common stock, $0.01 par value; 200,000,000 shares authorized, 40,254,890 shares issued and outstanding as of September 30, 2022 and December 31, 2021	403	403
Additional paid-in capital	172,016	170,241
Accumulated other comprehensive loss	(211)	(225)
Accumulated deficit	(128,195)	(94,151)
Total stockholders' equity	44,013	76,268
Total liabilities and stockholders' equity	$ 49,488	$ 92,879

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 September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Revenue - license fee:	$ —	$ —	$ —	$ 18,000
Operating expenses:				
Research and development	4,862	9,344	22,266	28,120
General and administrative	2,967	3,059	11,782	8,300
Total operating expenses	7,829	12,403	34,048	36,420
Loss from operations	(7,829)	(12,403)	(34,048)	(18,420)
Other income:				
(Loss) gain from foreign exchange	—	(10)	26	3
Other (expense) income, net	(67)	(191)	(22)	92
Other (loss) income, net	(67)	(201)	4	95
Net loss	$ (7,896)	$ (12,604)	$ (34,044)	$ (18,325)
Net loss per share, basic and diluted	$ (0.20)	$ (0.32)	$ (0.85)	$ (0.50)
Weighted-average shares used to compute net loss per share, basic and diluted	40,254,890	39,962,069	40,254,890	36,662,627
Comprehensive loss:				
Net loss	$ (7,896)	$ (12,604)	$ (34,044)	$ (18,325)
Unrealized gain on available-for-sale securities	181	273	14	121
Comprehensive loss	$ (7,715)	$ (12,331)	$ (34,030)	$ (18,204)

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)

	Nine Months Ended September 30,	
	2022	2021
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net loss	$ (34,044)	$ (18,325)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation	577	141
Stock-based compensation expense	1,775	1,690
Net realized loss on sale of marketable securities	—	(121)
Amortization of premium on marketable securities	1,055	1,210
Non-cash loss on termination of lease	137	—
Gain on sale of equipment	(147)	—
Gain from foreign exchange	—	3
Changes in operating assets and liabilities:		
Prepaid expenses and other assets	(231)	106
Accounts payable	(9,762)	1,505
Other liabilities	(1,432)	(1,213)
Net cash used in operating activities	(42,072)	(15,004)
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchase of property and equipment	(7)	(477)
Proceeds from sale of property and equipment	173	—
Purchase of available-for-sale marketable securities	(3,671)	(165,914)
Proceeds from sales and maturities of marketable securities	66,094	105,889
Net cash provided by (used in) investing activities	62,589	(60,502)
CASH FLOWS FROM FINANCING ACTIVITIES:		
Proceeds from initial public offering, net of issuance costs	—	90,506
Proceeds from exercise of stock options	—	477
Net cash provided by financing activities	—	90,983
Net change in cash and cash equivalents	20,517	15,477
Cash and cash equivalents at beginning of period	8,305	2,416
Effect of exchange rates on cash	58	—
Cash and cash equivalents at end of period	$ 28,880	$ 17,893
Supplemental non-cash disclosure:		
NONCASH INVESTING AND FINANCING ACTIVITY:		
Non-cash gain on sale of fixed assets	$ 14	$ —
Reclassification of par to additional paid-in-capital	$ —	$ 2
Conversion of Series A and B convertible preferred stock to common stock	$ —	$ 72,925
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 (loss) gain on available-for-sale marketable securities	$ (14)	$ 121

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

Landos Biopharma, Inc.
Consolidated Statements of Convertible Preferred Stock and Stockholders' Equity
(in thousands, except share amounts)
(Unaudited)

	Convertible Preferred Stock		Common Stock					
	Shares	Amounts	Shares	Amounts	Additional Paid-in Capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total Stockholders' Equity
Balance at December 31, 2021	—	$ —	40,254,890	$ 403	$ 170,241	$ (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	—	$ -	40,254,890	$ 403	$ 171,182	$ (467)	$ (109,015)	$ 62,103
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	—	$ -	40,254,890	$ 403	$ 171,816	$ (392)	$ (120,299)	$ 51,528
Stock compensation expense	—	—	—	—	200	—	—	200
Unrealized gain (loss) on available-for-sale securities	—	—	—	—	—	181	—	181
Net loss	—	—	—	—	—	—	(7,896)	(7,896)
Balance at September 30, 2022	—	$ —	40,254,890	$ 403	$ 172,016	$ (211)	$ (128,195)	$ 44,013

	Convertible Preferred Stock		Common Stock					
	Shares	Amounts	Shares	Amounts	Additional Paid-in Capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total Stockholders' Equity
Balance at December 31, 2020	11,260,608	$ 73,037	12,767,909	$ 71	$ 1,633	$ 10	$ (55,729)	$ (54,015)
Conversion of preferred stock to common stock upon closing of the initial public offering	(11,260,608)	(73,037)	20,549,478	262	72,775	—	—	73,037
Issuance of common stock, net of issuance costs	—	—	6,250,000	63	90,443	—	—	90,506
Stock-based compensation expense	—	—	—	—	1,023	—	—	1,023
Exercise of stock options	—	—	299,282	3	555	—	—	558
Unrealized loss on available-for-sale securities	—	—	—	—	—	(112)	—	(112)
Net loss	—	—	—	—	—	—	(9,818)	(9,818)
Balance at March 31, 2021	—	$ -	39,866,669	$ 399	$ 166,429	$ (102)	$ (65,547)	$ 101,179
Stock compensation expense	—	—	—	—	312	—	—	312
Exercise of stock options	—	—	34,217	—	64	—	—	64
Unrealized loss on available-for-sale securities	—	—	—	—	—	(40)		(40)
Net income	—	—	—	—	—		4,097	4,097
Balance at June 30, 2021	—	$ -	39,900,886	$ 399	$ 166,805	$ (142)	$ (61,450)	$ 105,612
Stock compensation expense	—	—	—	—	355	—	—	355
Exercise of stock options	—	—	152,271	2	280	—	—	282
Unrealized gain (loss) on available-for-sale securities	—	—	—	—	—	273	—	273
Net loss	—	—	—	—	—		(12,604)	(12,604)
Balance at September 30, 2021	—	$ —	40,053,157	$ 401	$ 167,440	$ 131	$ (74,054)	$ 93,918

The accompanying notes are an integral part of these 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.

Initial Public Offering

In February 2021, the Company completed its initial public offering ("IPO") in which it sold 6,250,000 shares of common stock at an initial public offering price of $16.00 per share. Proceeds from the IPO, net of underwriting discounts, commissions and offering costs paid by the Company, were approximately $90.5 million.

In addition, in connection with the completion of the Company’s IPO, all outstanding shares of the Company's convertible preferred stock were converted into 20,549,478 shares of the Company’s common stock.

Stock Split

In January 2021, the Company’s Board of Directors approved a 1.8249-for-1 stock split of the Company’s outstanding common shares. Also in January 2021, the Company amended its Amended and Restated Certificate of Incorporation to affect the stock split. The stock split resulted in an adjustment to the preferred share conversion price to reflect a proportional increase in the number of common shares to be issued upon conversion. The accompanying condensed consolidated financial statements and notes to the condensed consolidated financial statements give retroactive effect to the stock split for all periods presented.

Liquidity and Capital Resources

As of September 30, 2022, the Company had cash, cash equivalents and marketable securities of $48.0 million, which it believes will be sufficient to fund its planned operations for at least the next 12 months. Upon completion of its portfolio prioritization review later this year, the Company will provide further details into its operating plans and capital resources.

Since the Company’s inception in 2017, it has funded operations through the issuance of convertible preferred stock and convertible promissory notes, the proceeds from its IPO, and the upfront payment from the license and collaboration agreement (Note 7). As of September 30, 2022, the Company had an accumulated deficit of $128.2 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 planned clinical trials, to continue and expand its research and development operations that support its 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. (“Landos Australia”). 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 United States of America ("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, 2021. 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 nine months ended September 30, 2022 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.

Reclassification of Prior Year Presentation

Certain reclassifications have been made to the prior year presentation to conform to the 2022 presentation.

Significant Accounting Policies

The significant accounting policies used in preparation of these unaudited condensed consolidated financial statements for the three and nine months ended September 30, 2022 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, 2021.

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 commercial paper 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 with original maturities of over ninety (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 (expense), net, within the Condensed Consolidated Statements of Operations and Comprehensive Loss or until an unrealized loss is considered other-than-temporary. Realized gains and losses are determined using the specific identification method.

The Company evaluates its investments with unrealized losses for other-than-temporary impairment. When assessing investments for other-than-temporary impairments in value, the Company considers such factors as, among other things, how significant the impairment in value is as a percentage of the original cost, how long the market value of the investment has been less than its original cost, the Company's ability and intent to retain the investment for a period of time sufficient to allow for any anticipated recovery in fair value and market conditions. If the Company determines from this analysis that it does not expect to receive cash flows sufficient to recover the entire amortized cost of the security, a credit loss exists, the impairment is considered other-than-temporary and is recognized in the Condensed Consolidated Statements of Operations and Comprehensive Loss.

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 may at times be 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 has not experienced any losses on its deposits of cash or cash equivalents. The Company's available-for-sale investments primarily consist of high-grade corporate debt, 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.

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 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 September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Numerator:				
Net Loss	$ (7,896)	$ (12,604)	$ (34,044)	$ (18,325)
Denominator:				
Weighted-average shares of common stock issued and outstanding	40,254,890	40,156,089	40,254,890	36,890,531
Less: weighted-average unvested common stock subject to repurchase	—	(194,020)	—	(227,904)
Weighted-average common stock outstanding used to calculate net loss per common share, basic and diluted	40,254,890	39,962,069	40,254,890	36,662,627
Net loss per common stock, basic and diluted	$ (0.20)	$ (0.32)	$ (0.85)	$ (0.50)

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:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Stock options to purchase common stock	3,404,736	1,291,098	3,404,736	1,291,098
Common stock subject to repurchase	—	194,020	—	227,904
Total	3,404,736	1,485,118	3,404,736	1,519,002

Comprehensive Loss

The Company's comprehensive loss is currently comprised of changes in unrealized gain 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 February 2016, the FASB issued ASU 2016-02—*Leases (Topic 842)*, requiring the recognition of lease assets and liabilities on the balance sheet. The standard: (a) clarifies the definition of a lease; (b) requires a dual approach to lease classification similar to current lease classifications; and (c) causes lessees to recognize leases on the balance sheet as a lease liability with a corresponding right-of-use asset for leases with a lease-term of more than twelve months. The standard was effective for public entities for fiscal years beginning after December 15, 2018 and is effective for nonpublic entities for fiscal years beginning after December 15, 2021. The Company adopted ASU 2016-02, as amended, by applying the modified retrospective approach for leases existing at, and entered into after January 1, 2022. As a result, prior periods are presented in accordance with the previous guidance in ASC 840, *Leases* ("ASC 840"). The Company has elected to apply the "practical expedient package," which permits it to not reassess previous conclusions around lease identification, lease classification, and initial direct costs. Further, the Company made accounting policy elections to exclude leases with terms of 12 months or less from the recognition requirements and to not separate lease and non-lease components. On January 1, 2022, the Company recognized an initial right-of-use asset and lease liability of $0.8 million. The adoption of Topic 842 did not have an impact on the Company's Condensed Consolidated Statements of Operations and Comprehensive Loss and did not require recognition of a cumulative-effect adjustment to the opening balance of retained earnings in the period of adoption. The Company elected to continue applying the guidance under ASC 840 for comparative periods, as allowed in Topic 842.

Recently Issued Accounting Pronouncements Not Yet Adopted

In June 2016, the FASB issued ASU 2016-13—*Financial Instruments (Topic 326) Measurement of Credit Losses on Financial Instrument* ("CECL"), 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. Early adoption is permitted for fiscal years beginning after December 15, 2018. The Company expects to adopt the new standard in the annual reporting period beginning after December 15, 2022 and does not expect the adoption of this ASU to have a material impact on the consolidated financial statements.

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 September 30, 2022 (in thousands):

	September 30, 2022			
	Level 1	Level 2	Level 3	Aggregate fair value
Assets:				
U.S. government treasury securities	11,986	—	—	11,986
Fixed income securities	—	13,763	—	13,763
Asset backed securities	—	5,348	—	5,348
Total assets	$ 11,986	$ 19,111	$ —	$ 31,097

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, 2021 (in thousands):

	December 31, 2021			
	Level 1	Level 2	Level 3	Aggregate Fair Value
Assets:				
Money market funds	$ 3,180	$ —	$ —	$ 3,180
Fixed income securities	—	54,224	—	54,224
Asset backed securities	—	28,351	—	28,351
Total assets	$ 3,180	$ 82,575	$ —	$ 85,755

The contractual maturities of available-for-sale securities as of September 30, 2022 are as follows (in thousands):

Within one year	$ 14,033
Within one to five years	5,078
Total contractual maturities	$ 19,111

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 certificates of deposits, 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 nine months ended September 30, 2022.

4. Balance Sheet Components

Property and Equipment, net

Property and equipment, net consists of the following**:**

	September 30, 2022	December 31, 2021
Laboratory equipment	$ 561	$ 837
Furniture and fixtures	14	307
Construction in process	—	104
Total property and equipment	575	1,248
Less: accumulated depreciation	(575)	(541)
Total property and equipment, net	$ —	$ 707

Depreciation expense for property and equipment was $0 and $48,000 for the three months ended September 30, 2022 and 2021, respectively, and $0.6 million and $0.1 million for the nine months ended September 30, 2022 and 2021, respectively.

Accrued Liabilities

Accrued liabilities consist of the following:

	September 30, 2022	December 31, 2021
Accrued research and development	$ 1,314	$ 1,575
Accrued general and administrative	230	996
Accrued payroll and employee benefits	727	1,132
Total accrued liabilities	$ 2,271	$ 3,703

5. Stock-Based Compensation

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) 1,000,000 shares; or (iii) a lesser number of shares determined by the Company's board of directors. Subject to this provision, the Company added 1,824,900 shares available for grant to the 2019 Plan effective January 1, 2022. As of September 30, 2022, there were approximately 6,825,149 shares available for future grants.

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 402,548 shares available for grant to the 2021 ESPP effective January 1, 2022. As of September 30, 2022, there were approximately 791,251 shares available for future grants under the 2021 ESPP. As of September 30, 2022, 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 1,000,000 shares. As of September 30, 2022, there were 1,000,000 shares available for future grants under the 2022 Inducement Plan.

Stock Option Awards

The total intrinsic value of stock options exercised was $3.0 million for the nine months ended September 30, 2021.

The weighted average fair value per share of options to purchase common stock granted was $0.90 and $8.59 for the nine months ended September 30, 2022 and 2021, respectively.

The following table summarizes stock-based compensation expense for employees, which was included in the condensed consolidated statements of operations and comprehensive loss as follows (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Research and development	$ 46	$ 224	$ 596	$ 1,213
General and administrative	154	131	1,179	477
Total stock-based compensation expense	$ 200	$ 355	$ 1,775	$ 1,690

At September 30, 2022, the total compensation cost related to unvested stock-based awards granted under the 2019 Plan but not yet recognized was approximately $2.2 million, which is expected to be recognized over a weighted-average period of approximately 3.5 years.

6. 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 $0.1 million for the three months ended September 30, 2022 and 2021, respectively, and $0.1 million and $0.2 million for the nine months ended September 30, 2022 and 2021, respectively.

7. License Agreement

License and Collaboration Agreement

On May 14, 2021, the Company entered into an exclusive license and collaboration agreement (the "LianBio Agreement") with LianBio Respiratory Limited ("LianBio"). LianBio 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 LianBio 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"). LianBio 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 addition, the Company has the ability to receive additional payments upon the achievement of certain development and sales milestone payments of up to an aggregate of $95.0 million and $105.0 million, respectively. The Company is also entitled to receive double-digit royalties on net sales of the Products in the Territory.

In accordance with the LianBio Agreement, the Company agreed to supply to LianBio all clinical and commercial requirements of Products. The terms of the agreement do not provide for either (i) an option to LianBio to purchase Products from the Company at a discount from the standalone selling price or (ii) minimum purchase quantities. In addition, the Company and LianBio 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 LianBio 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 LianBio 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 LianBio, 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 LianBio'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 September 30, 2022, the Company determined that the contract contains a single performance obligation to deliver the License, which represents functional intellectually 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 LianBio 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, 2021 and 2020 and for each of the two years in the period ended December 31, 2021 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 24, 2022. 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, 2021 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 discovery and development of oral therapeutics for patients with autoimmune diseases. We believe we were the first to identify and target LANCL2, NLRX1 and PLXDC2, which are immunometabolic pathways or targets. We believe that these novel pathways are 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 have identified seven novel immunometabolic pathways or targets based on predictions of immunometabolic function using a proprietary advanced artificial intelligence-based integrated computational and experimental precision medicine platform. Our near-term focus is on our clinical-stage programs including omilancor for the treatment of ulcerative colitis, or UC, NX-13 for the treatment of UC, and LABP-104 for the potential treatment of systemic lupus erythematosus, or SLE, and rheumatoid arthritis, or RA. We believe the therapeutics we discover and develop, if approved, could have a significant positive impact on the quality of life of patients suffering from autoimmune diseases.

Omilancor is a gut-restricted oral therapeutic that is the first product candidate designed to engage the novel target lanthionine synthetase C-like protein 2, or LANCL2, a membrane receptor that has been shown to modulate immunological mechanisms that are associated with autoimmune diseases such as UC. We are developing omilancor as a once-daily oral treatment initially for UC. We are working on a reformulation of omilancor, including dose selection and assessment, and expect to announce both the timing and the next steps in the development of omilancor later this year.

NX-13 is a novel, gut-restricted oral therapeutic 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 immune cells in the gastrointestinal tract. We are developing NX-13 as a once-daily oral treatment for UC. In August 2022, we announced positive top-line results for the Phase 1b trial of NX-13 in moderate UC patients. The data from this trial showed that NX-13 was well tolerated following evaluation of multiple doses over four weeks compared with a placebo. While the study was shorter in duration than standard induction trials and not powered for efficacy, there was an indication of signals of clinical improvement as soon as two weeks in patients' symptoms and four weeks by endoscopy in exploratory endpoints. We expect to announce the timing for the initiation of a Phase 2 trial of NX-13 in moderate-to-severe UC patients later this year.

LABP-104 is a novel, systemically bioavailable, oral therapeutic that targets LANCL2. We are developing LABP-104 as a once-daily oral treatment for SLE and/or RA. The pathogenesis of SLE is connected to defective apoptosis leading to stimulation of B cells by dendritic cells and CD4+ T cells to produce auto-antibodies. These antibodies activate the complement system and deposit in organs, leading to inflammation and tissue damage. We believe the activation of LANCL2 can intercept these events upstream through skewing of CD4+ T cells to regulatory phenotypes and maintenance of the metabolic requirements for autophagy. We conducted a Phase 1a trial of LABP-104 in healthy volunteers and expect topline results to be reported later this year. We expect to announce both the timing and the next steps for the development of LABP-104 also later this year.

In May 2021, we entered into an exclusive collaboration and license agreement, or the LianBio Agreement, with LianBio Respiratory Limited, or LianBio, pursuant to which we granted LianBio an exclusive license to develop, manufacture and commercialize OMILANCOR and NX-13 in Greater China (mainland China, Hong Kong, Taiwan and Macau), South Korea, Singapore, Thailand, Vietnam, Myanmar, Cambodia, Indonesia, and the Philippines, or the Territory. We received an upfront cash payment of $18.0 million in connection with the execution of the LianBio Agreement and are eligible to receive development milestone payments of up to $95.0 million and sales milestone payments of up to $105.0 million. We are also eligible to receive tiered low-double-digit royalties based on net sales of omilancor and NX-13 in the Territory, 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. We have funded our operations primarily through the sale of equity securities.

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, and through the upfront payment from a license and collaboration agreement with a related party. As of September 30, 2022, we had an accumulated deficit of $128.2 million and we expect to incur substantial operating losses for at least the next several years. As a result, we will need to raise additional capital to initiate and complete our planned clinical trials, to continue and expand our research and development operations that support our planned discovery, 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 September 30, 2022, we had cash, cash equivalents and marketable securities of $48.0 million, which we believe will be sufficient to fund our planned operations for at least the next 12 months. Upon completion of our portfolio prioritization review later this year, we will provide further details into our operating plans and capital resources. We anticipate that our expenses may increase significantly in connection with our ongoing activities, as we:

- conduct our ongoing and planned clinical trials of omilancor, NX-13, and LABP-104, as well as initiate and complete additional clinical trials;
- 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 higher development costs than those in earlier stages of clinical development, primarily due to the increased size and duration of later-stage clinical trials. While we expect our research and development expenses to remain relatively consistent in the near-term as we complete our ongoing clinical trials, and as a result of our strategic review of our clinical programs, we expect that our research and development expenses will increase in the long-term and will comprise a larger percentage of our total expenses as we initiate new clinical trials, hire additional research and development staff, 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, 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 remain relatively consistent for the foreseeable future; 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.

Other Income, net

Other income, net, primarily consists of interest income received from available-for-sale marketable securities.

Results of Operations

Comparison of the three and nine months ended September 30, 2022 and 2021

The following table summarizes our results of operations for the three and nine months ended September 30, 2022 and 2021 (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Revenue - license fee:	$ —	$ —	$ —	$ 18,000
Operating expenses:				
Research and development	4,862	9,344	22,266	28,120
General and administrative	2,967	3,059	11,782	8,300
Total operating expenses	7,829	12,403	34,048	36,420
Loss from operations	(7,829)	(12,403)	(34,048)	(18,420)
Other income:				
(Loss) gain from foreign exchange	—	(10)	26	3
Other (expense) income, net	(67)	(191)	(22)	92
Other (loss) income, net	(67)	(201)	4	95
Net loss	$ (7,896)	$ (12,604)	$ (34,044)	$ (18,325)

Research and Development Expenses

Research and development expenses were $4.9 million for the three months ended September 30, 2022 compared to $9.3 million for the three months ended September 30, 2021. The decrease of $4.4 million was primarily attributed to a decrease in CRO and clinical data management costs, as well as a decrease in compensation costs due to the strategic review of our clinical programs that resulted in the termination of further enrollment in two clinical trials of omilancor for the treatment of Crohn's Disease, or CD. Research and development expenses were $22.3 million for the nine months ended September 30, 2022 compared to $28.1 million for the nine months ended September 30, 2021. The decrease of $5.8 million was primarily attributed to a decrease in clinical activities and manufacturing costs related to our omilancor program due to the termination of further enrollment in two clinical trials of omilancor for the treatment of CD, partially offset by an increase in consulting costs and clinical activities related to our NX-13 and LABP-104 programs.

The following table summarizes our research and development expenses by product candidate for the three and nine months ended September 30, 2022 and 2021 (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
External costs by clinical program:				
Omilancor	$ 1,118	$ 4,951	$ 7,366	$ 15,515
NX-13	2,124	1,526	6,471	4,950
LABP-104	182	503	1,472	1,370
Total external costs by clinical program:	3,424	6,980	15,309	21,835
Compensation	796	1,446	3,333	4,129
Other	642	918	3,624	2,156
Total research and development expenses	$ 4,862	$ 9,344	$ 22,266	$ 28,120

General and Administrative Expenses

General and administrative expenses were $3.0 million for the three months ended September 30, 2022 compared to $3.1 million for the three months ended September 30, 2021. The decrease of $0.1 million was primarily attributable to a decrease in consulting costs, partially offset by increases in employee-related expenses, including stock-based compensation, as well as an increase in legal fees. General and administrative expenses were $11.8 million for the nine months ended September 30, 2022 compared to $8.3 million for the nine months ended September 30, 2021. The increase of $3.5 million was primarily attributable to increases in employee-related expenses, including stock-based compensation, legal costs, recruiting fees, and a one-time charge incurred in connection with a lease termination, partially offset by a decrease in consulting costs.

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, and the upfront payment from the LianBio Agreement. On February 3, 2021, we completed our IPO in which we issued and sold 6,250,000 shares of our common stock and received net proceeds of $90.5 million, after deducting underwriters' discounts and commissions and expenses payable by us.

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 September 30, 2022, 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 million.

As of September 30, 2022, we had $48.0 million in cash, cash equivalents and marketable securities and an accumulated deficit of $128.2 million.

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

	Nine Months Ended September 30,	
	2022	2021
Net cash used in operating activities	$ (42,072)	$ (15,004)
Net cash provided by (used in) investing activities	62,589	(60,502)
Net cash provided by financing activities	—	90,983
Net change in cash and cash equivalents	$ 20,517	$ 15,477

Operating Activities

During the nine months ended September 30, 2022, we used cash in operating activities of $42.1 million, reflecting a net loss of $34.0 million, partially offset by non-cash charges of $3.4 million and a net change of $11.4 million in our operating assets and liabilities. The non-cash charges consist primarily of $1.8 million of stock-based compensation expense, $1.1 million related to the amortization of the premium on marketable securities and $0.6 million of depreciation expense. The net change in our operating assets and liabilities was primarily due to a decrease in accounts payable and other liabilities.

During the nine months ended September 30, 2021, we used cash in operating activities of $15.0 million, reflecting a net loss of $18.3 million, partially offset by non-cash charges of $2.9 million. The non-cash charges consist primarily of $1.7 million of stock-based compensation expense and $1.2 million related to amortization of premium on marketable securities.

Investing Activities

Net cash provided by investing activities for the nine months ended September 30, 2022 was $62.6 million, consisting primarily of proceeds from sales and maturities of marketable securities, partially offset by purchases of available-for-sale marketable securities. Net cash used in investing activities for the nine months ended September 30, 2021 was $60.5 million, consisting primarily of purchases of marketable securities and property and equipment, partially offset by proceeds from sales and maturities of marketable securities.

Financing Activities

Net cash provided by financing activities in the nine months ended September 30, 2021 of $91.0 million was primarily related to net proceeds received from our IPO.

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 revenue under the LianBio Agreement as future payments are conditioned upon the achievement of development and commercialization milestones that are uncertain as of this date. Although we expect our expenses to remain relatively consistent in the near-term, we expect our expenses to increase in the long-term in connection with our ongoing activities, particularly as we continue the research and development of, initiate additional 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 will enable us to fund our planned operations for at least the next 12 months. Upon completion of our portfolio prioritization review later this year, we will provide further details into our operating plans and capital resources. 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 omilancor, NX-13 and LABP-104;
- the incremental clinical and manufacturing costs that we may incur in relation to the timing and next steps for omilancor, NX-13 and LABP-104 that we plan to announce later this year;
- the costs related to facilities and operations;
- the costs and results of discovery work;

- 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 if 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, marketing and distribution arrangements or other sources. 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. 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 Judgments 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 United States. 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 condensed consolidated financial statements included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2021. 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, 2021. There were no material changes to our critical accounting policies during the nine months ended September 30, 2022.

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 September 30, 2022, 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 September 30, 2022 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

An investment in our common stock involves a high degree of risk. You should consider carefully the risks and uncertainties described under Item 1A of Part I of our Annual Report on Form 10-K, together with all other information contained or incorporated by reference in this report before you decide to invest in our common stock. If any of the Risk Factors were to actually occur, our business, financial condition, results of operations and our potential future growth prospects could be materially and adversely affected. Under the circumstances, the trading price of our common stock could decline, and you may lose all or part of your investment.

If we fail to comply or regain compliance with the continued listing standards of the Nasdaq Global Market, we may be delisted and the price of our common stock, our ability to access the capital markets and our financial condition could be negatively impacted.

Our common stock is currently listed on Nasdaq under the symbol "LABP." To maintain the listing of our common stock on the Nasdaq Global Market, we are required to meet certain listing requirements, including, among others, maintaining a minimum closing bid price of $1.00 per share. In June 2022, the decline in the market price of our common stock resulted in a notice that we are not in compliance with the minimum bid price requirement for continued listing on the Nasdaq Global Market. If we are not able to regain compliance within the compliance period offered by Nasdaq, we could be delisted, which would have a further material adverse effect on market prices of our common stock and stockholder liquidity. We intend to actively monitor the bid price of our common stock and will consider available options to regain compliance with the listing requirement; however, there can be no assurance that we will be able to regain compliance with the listing requirement or will otherwise be in compliance with other Nasdaq listing criteria. If the Nasdaq Global Market delists our securities from trading on its exchange for failure to meet the listing standards, we and our stockholders could face significant negative consequences including:

- limited availability of market quotations for our securities;
- a determination that the common stock is a "penny stock" which will require brokers trading in the common stock to adhere to more stringent rules, possibly resulting in a reduced level of trading activity in the secondary trading market for shares of common stock;
- a limited amount of analyst coverage; and
- a decreased ability to issue additional securities or obtain additional financing in the future.

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

Unregistered Sales of Equity Securities

None.

Use of Proceeds

On February 3, 2021, our Registration Statement on Form S-1, as amended (File No. 333-252083), was declared effective in connection with our initial public offering, in which we issued and sold 6,250,000 shares of our common stock at a public offering and received net proceeds of $90.5 million, after deducting underwriters' discounts and commissions and expenses payable by us. The joint book-running managers of our initial public offering were J.P. Morgan Securities LLC, Jefferies LLC and SVB Leerink LLC, and Raymond James & Associates, Inc. acted as lead manager. There has been no material change in the planned use of proceeds from our initial public offering as described in our prospectus filed pursuant to Rule 424(b)(4) under the Securities Act with the SEC on February 4, 2021.

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	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. 00139971), filed with the Securities and Exchange Commission on February 8, 2021).
3.2	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).
31.1*	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.
32.1*#	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.
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: November 10, 2022

By: /s/ Gregory Oakes

Gregory Oakes
President and Chief Executive Officer
(Principal Executive and Financial Officer)

Exhibit 31.1

CERTIFICATION 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

I, Gregory Oakes, certify that:

1. I have reviewed this 10-Q of Landos Biopharma, 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. I am 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. I have disclosed, based on my 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.

Landos Biopharma, Inc.

Date: November 10, 2022

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

Exhibit 32.1

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

In connection with the Quarterly Report of Landos Biopharma, Inc. (the "Company") on Form 10-Q for the period ending September 30, 2022 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: November 10, 2022

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