

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

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

For the quarterly period ended June 30, 2025

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: **001-34949**

ARBUTUS BIOPHARMA CORPORATION

(Exact Name of Registrant as Specified in Its Charter)

British Columbia, Canada
(State or Other Jurisdiction of
Incorporation or Organization)

98-0597776
(I.R.S. Employer
Identification No.)

701 Veterans Circle, Warminster, PA 18974

(Address of Principal Executive Offices and Zip Code)

267-469-0914

(Registrant's Telephone Number, Including Area Code)

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

| <u>Title of each class</u> | <u>Trading Symbol(s)</u> | <u>Name of each exchange on which registered</u> |
|----------------------------------|--------------------------|--|
| Common Shares, without par value | ABUS | 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, a 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 |
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input 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, 2025, the registrant had 191,698,695 common shares, without par value, outstanding.

ARBUTUS BIOPHARMA CORPORATION

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PART I. FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS (UNAUDITED)

ARBUTUS BIOPHARMA CORPORATION

Condensed Consolidated Balance Sheets
(Unaudited)
(In thousands of U.S. Dollars, except share amounts)

| | June 30, 2025 | December 31, 2024 |
|--|-------------------|-------------------|
| Assets | | |
| Current assets: | | |
| Cash and cash equivalents | \$ 37,412 | \$ 36,330 |
| Investments in marketable securities, current | 60,676 | 86,293 |
| Accounts receivable | 1,025 | 2,409 |
| Prepaid expenses and other current assets | 4,006 | 2,284 |
| Total current assets | 103,119 | 127,316 |
| Property and equipment, net of accumulated depreciation and impairment of \$13,315 (December 31, 2024: \$12,996) | 148 | 3,309 |
| Right of use asset | — | 1,048 |
| Other non-current assets | — | 34 |
| Total assets | \$ 103,267 | \$ 131,707 |
| Liabilities and stockholders' equity | | |
| Current liabilities: | | |
| Accounts payable and accrued liabilities | \$ 4,508 | \$ 7,564 |
| Deferred license revenue, current | — | 7,571 |
| Lease liability, current | 514 | 483 |
| Total current liabilities | 5,022 | 15,618 |
| Liability related to sale of future royalties | 3,910 | 4,829 |
| Deferred license revenue, non-current | — | 2,863 |
| Contingent consideration | 10,784 | 10,225 |
| Lease liability, non-current | 575 | 806 |
| Total liabilities | 20,291 | 34,341 |
| Stockholders' equity | | |
| Common shares | | |
| Authorized: unlimited number without par value | | |
| Issued and outstanding: 191,641,511 (December 31, 2024: 189,963,492) | 1,417,110 | 1,410,025 |
| Additional paid-in capital | 82,628 | 82,048 |
| Deficit | (1,368,575) | (1,346,572) |
| Accumulated other comprehensive loss | (48,187) | (48,135) |
| Total stockholders' equity | 82,976 | 97,366 |
| Total liabilities and stockholders' equity | \$ 103,267 | \$ 131,707 |

See accompanying notes to the condensed consolidated financial statements.

ARBUTUS BIOPHARMA CORPORATION

Condensed Consolidated Statements of Operations and Comprehensive Income (Loss)

(Unaudited)

(In thousands of U.S. Dollars, except share and per share amounts)

| | Three Months Ended June 30, | | Six Months Ended June 30, | |
|---|-----------------------------|--------------------|---------------------------|--------------------|
| | 2025 | 2024 | 2025 | 2024 |
| Revenue | | | | |
| Collaborations and licenses | \$ 10,213 | \$ 1,155 | \$ 11,529 | \$ 2,094 |
| Non-cash royalty revenue | 526 | 571 | 974 | 1,164 |
| Total Revenue | <u>10,739</u> | <u>1,726</u> | <u>12,503</u> | <u>3,258</u> |
| Operating expenses | | | | |
| Research and development | 5,498 | 15,551 | 14,457 | 30,954 |
| General and administrative | 3,328 | 7,547 | 9,160 | 12,859 |
| Change in fair value of contingent consideration | 260 | 211 | 559 | 391 |
| Restructuring costs | 165 | — | 12,538 | — |
| Total operating expenses | <u>9,251</u> | <u>23,309</u> | <u>36,714</u> | <u>44,204</u> |
| Gain (loss) from operations | <u>1,488</u> | <u>(21,583)</u> | <u>(24,211)</u> | <u>(40,946)</u> |
| Other income | | | | |
| Interest income | 1,042 | 1,829 | 2,239 | 3,374 |
| Interest expense | (28) | (34) | (56) | (78) |
| Foreign exchange gain (loss) | 21 | (8) | 25 | (21) |
| Total other income | <u>1,035</u> | <u>1,787</u> | <u>2,208</u> | <u>3,275</u> |
| Net income (loss) | <u>\$ 2,523</u> | <u>\$ (19,796)</u> | <u>\$ (22,003)</u> | <u>\$ (37,671)</u> |
| Net income (loss) per common share | | | | |
| Basic | \$ 0.01 | \$ (0.11) | \$ (0.12) | \$ (0.21) |
| Diluted | \$ 0.01 | \$ (0.11) | \$ (0.12) | \$ (0.21) |
| Weighted average number of common shares | | | | |
| Basic | 191,551,282 | 188,041,489 | 191,130,631 | 181,842,519 |
| Diluted | 192,399,733 | 188,041,489 | 191,130,631 | 181,842,519 |
| Comprehensive income (loss) | | | | |
| Unrealized (loss) gain on available-for-sale securities | \$ (21) | \$ 63 | \$ (52) | \$ 113 |
| Comprehensive income (loss) | <u>\$ 2,502</u> | <u>\$ (19,733)</u> | <u>\$ (22,055)</u> | <u>\$ (37,558)</u> |

See accompanying notes to the condensed consolidated financial statements.

ARBUTUS BIOPHARMA CORPORATION

Condensed Consolidated Statements of Stockholders' Equity

(Unaudited)

(In thousands of U.S. Dollars, except share amounts)

| | <u>Common Shares</u> | | <u>Additional Paid-In Capital</u> | <u>Deficit</u> | <u>Accumulated Other Comprehensive Loss</u> | <u>Total Stockholders' Equity</u> |
|---|-------------------------|----------------------|-----------------------------------|----------------|---|-----------------------------------|
| | <u>Number of Shares</u> | <u>Share Capital</u> | | | | |
| Balance December 31, 2024 | 189,963,492 | \$ 1,410,025 | \$ 82,048 | \$ (1,346,572) | \$ (48,135) | \$ 97,366 |
| Stock-based compensation expense | — | — | 3,564 | — | — | 3,564 |
| Issuance of common shares pursuant to exercise of options | 892,857 | 4,616 | (1,963) | — | — | 2,653 |
| Issuance of common shares pursuant to ESPP | 44,541 | 173 | (42) | — | — | 131 |
| Issuance of common shares upon vesting of RSUs | 580,584 | 1,518 | (1,518) | — | — | — |
| Unrealized loss on available-for-sale securities | — | — | — | — | (31) | (31) |
| Net loss | — | — | — | (24,526) | — | (24,526) |
| Balance March 31, 2025 | 191,481,474 | \$ 1,416,332 | \$ 82,089 | \$ (1,371,098) | \$ (48,166) | \$ 79,157 |
| Stock-based compensation expense | — | — | 864 | — | — | 864 |
| Issuance of common shares pursuant to exercise of options | 160,037 | 778 | (325) | — | — | 453 |
| Unrealized loss on available-for-sale securities | — | — | — | — | (21) | (21) |
| Net income | — | — | — | 2,523 | — | 2,523 |
| Balance June 30, 2025 | 191,641,511 | \$ 1,417,110 | \$ 82,628 | \$ (1,368,575) | \$ (48,187) | \$ 82,976 |

See accompanying notes to the condensed consolidated financial statements.

ARBUTUS BIOPHARMA CORPORATION

Condensed Consolidated Statements of Stockholders' Equity

(Unaudited)

(In thousands of U.S. Dollars, except share amounts)

| | Common Shares | | Additional Paid-In Capital | Deficit | Accumulated Other Comprehensive Loss | Total Stockholders' Equity |
|--|------------------|---------------|----------------------------|----------------|--------------------------------------|----------------------------|
| | Number of Shares | Share Capital | | | | |
| Balance December 31, 2023 | 169,867,414 | \$ 1,349,821 | \$ 81,270 | \$ (1,276,652) | \$ (48,421) | \$ 106,018 |
| Stock-based compensation expense | — | — | 2,014 | — | — | 2,014 |
| Issuance of common shares pursuant to the Open Market Sale Agreement | 8,666,077 | 21,765 | — | — | — | 21,765 |
| Issuance of common shares pursuant to exercise of options | 1,126,691 | 4,268 | (1,814) | — | — | 2,454 |
| Issuance of common shares pursuant to ESPP | 121,563 | 271 | (60) | — | — | 211 |
| Issuance of common shares upon vesting of RSUs | 410,482 | 1,190 | (1,190) | — | — | — |
| Unrealized gain on available-for-sale securities | — | — | — | — | 50 | 50 |
| Net loss | — | — | — | (17,875) | — | (17,875) |
| Balance March 31, 2024 | 180,192,227 | \$ 1,377,315 | \$ 80,220 | \$ (1,294,527) | \$ (48,371) | \$ 114,637 |
| Stock-based compensation expense | — | — | 3,180 | — | — | 3,180 |
| Issuance of common shares pursuant to the Open Market Sale Agreement | 7,833,922 | 22,359 | — | — | — | 22,359 |
| Issuance of common shares pursuant to exercise of options | 712,895 | 3,660 | (1,649) | — | — | 2,011 |
| Unrealized gain on available-for-sale securities | — | — | — | — | 63 | 63 |
| Net loss | — | — | — | (19,796) | — | (19,796) |
| Balance June 30, 2024 | 188,739,044 | \$ 1,403,334 | \$ 81,751 | \$ (1,314,323) | \$ (48,308) | \$ 122,454 |

See accompanying notes to the condensed consolidated financial statements.

ARBUTUS BIOPHARMA CORPORATION

Condensed Consolidated Statements of Cash Flows

(Unaudited)

(In thousands of U.S. Dollars)

| | Six Months Ended June 30, | |
|--|----------------------------------|------------------|
| | 2025 | 2024 |
| OPERATING ACTIVITIES | | |
| Net loss | \$ (22,003) | \$ (37,671) |
| Non-cash items: | | |
| Depreciation | 341 | 711 |
| Loss on impairment of leasehold improvements and lab equipment | 2,811 | — |
| Stock-based compensation expense | 4,428 | 5,194 |
| Change in fair value of contingent consideration | 559 | 391 |
| Non-cash royalty revenue | (974) | (1,164) |
| Non-cash interest expense | 55 | 70 |
| Net accretion and amortization of investments in marketable securities | (1,386) | (1,229) |
| Net change in operating items: | | |
| Accounts receivable | 1,384 | 9 |
| Prepaid expenses and other assets | (640) | (40) |
| Accounts payable and accrued liabilities | (3,056) | 837 |
| Change in deferred license revenue | (10,434) | (757) |
| Other liabilities | (225) | (150) |
| Net cash used in operating activities | (29,140) | (33,799) |
| INVESTING ACTIVITIES | | |
| Purchase of investments in marketable securities | (63,214) | (57,982) |
| Proceeds from sale of property and equipment | 9 | — |
| Disposition of investments in marketable securities | 90,165 | 79,601 |
| Acquisition of property and equipment | — | (96) |
| Net cash provided by investing activities | 26,960 | 21,523 |
| FINANCING ACTIVITIES | | |
| Issuance of common shares pursuant to the Open Market Sale Agreement | — | 44,124 |
| Issuance of common shares pursuant to exercise of stock options | 3,106 | 4,465 |
| Issuance of common shares pursuant to ESPP | 131 | 211 |
| Net cash provided by financing activities | 3,237 | 48,800 |
| Effect of foreign exchange rate changes on cash and cash equivalents | 25 | (21) |
| Increase in cash and cash equivalents | 1,082 | 36,503 |
| Cash and cash equivalents, beginning of period | 36,330 | 26,285 |
| Cash and cash equivalents, end of period | \$ 37,412 | \$ 62,788 |

See accompanying notes to the condensed consolidated financial statements.

ARBUTUS BIOPHARMA CORPORATION

Notes to Condensed Consolidated Financial Statements

(Tabular amounts in thousands of U.S. Dollars, except share and per share amounts)

1. Nature of business and future operations

Description of the Business

Arbutus Biopharma Corporation (“Arbutus” or the “Company”) is a clinical-stage biopharmaceutical company focused on infectious disease. The Company is currently developing imdusiran (AB-729), its proprietary, GalNAc-conjugated, subcutaneously-delivered ribonucleic acid interference (RNAi) therapeutic, and AB-101, its proprietary oral PD-L1 inhibitor, for the treatment of chronic hepatitis B (CHBV).

The Company continues to protect and defend its intellectual property, which is the subject of its ongoing lawsuits against Moderna Therapeutics, Inc. (Moderna) and against Pfizer Inc. and BioNTech SE (collectively, Pfizer/BioNTech) for their use of the Company’s patented lipid nanoparticle (LNP) delivery technology in their COVID-19 messenger ribonucleic acid interference (mRNA)-LNP vaccines. With respect to the Moderna lawsuit in the United States, the summary judgment phase of the case began in July 2025 and a trial date has been set for March 2026. In March 2025, the Company, along with Genevant Sciences GmbH and/or its affiliates (collectively, Genevant), filed five international lawsuits against Moderna in connection with the use of the Company’s LNP technology in Moderna’s COVID-19 mRNA-LNP vaccines and, in the Unified Patent Court, also other Moderna products that use the same LNP technology, including Moderna’s respiratory syncytial virus (RSV) vaccines. The first major hearings in the international lawsuits are expected in the first half of calendar year 2026. With respect to the Pfizer/BioNTech lawsuit, the claim construction hearing occurred in December 2024, and fact discovery is ongoing. The court has not provided guidance for the timing of its ruling in the claim construction hearing, which could potentially come in 2025.

Liquidity

At June 30, 2025, the Company had an aggregate of \$98.1 million in cash, cash equivalents and investments in marketable securities. The Company had no outstanding debt as of June 30, 2025. The Company believes it has sufficient cash resources to fund its operations for at least the next 12 months.

2. Significant accounting policies

Basis of presentation and principles of consolidation

These unaudited condensed consolidated financial statements have been prepared in accordance with United States generally accepted accounting principles for interim financial statements and accordingly, do not include all disclosures required for annual financial statements. These statements should be read in conjunction with the Company’s audited consolidated financial statements and notes thereto for the year ended December 31, 2024 included in the Company’s Annual Report on Form 10-K for the year ended December 31, 2024. These unaudited condensed consolidated financial statements include the accounts of Arbutus Biopharma Corporation and its one wholly-owned subsidiary, Arbutus Biopharma, Inc., and reflect, in the opinion of management, all adjustments and reclassifications necessary to fairly present the Company’s financial position as of June 30, 2025 and December 31, 2024, the Company’s results of operations for the three and six months ended June 30, 2025 and 2024, and the Company’s cash flows for the six months ended June 30, 2025 and 2024. Such adjustments are of a normal recurring nature. The results of operations for the three and six months ended June 30, 2025 are not necessarily indicative of the results for the full year. These unaudited condensed consolidated financial statements follow the same significant accounting policies as those described in the notes to the audited consolidated financial statements of the Company for the year ended December 31, 2024, except as described below under the section entitled “Recent Accounting Pronouncements.”

All intercompany balances and transactions have been eliminated.

Net income (loss) per share

Net income (loss) per share is calculated based on the weighted average number of common shares outstanding. Diluted net income (loss) per share is calculated using the treasury stock method and reflects the effect of all potentially dilutive securities (outstanding stock options and restricted stock units). The number of weighted average shares used in the calculation of net income per share for the three months ended June 30, 2025 was as follows:

| | Three Months Ended June 30, 2025 |
|--|---|
| Weighted average shares: | |
| Basic shares | 191,551,282 |
| Potentially dilutive shares from equity-based compensation plans | 848,451 |
| Diluted shares | 192,399,733 |

Diluted net loss per share does not differ from basic net loss per share for the six months ended June 30, 2025 or the three and six months ended June 30, 2024 since the effect of including potential common shares would be anti-dilutive as the Company was in a net loss position. Total antidilutive securities that were excluded from the computation of diluted weighted-average shares outstanding were as follows:

| | Three Months Ended June 30, | | Six Months Ended June 30, | |
|--|------------------------------------|-------------|----------------------------------|-------------|
| | 2025 | 2024 | 2025 | 2024 |
| Outstanding stock options and restricted stock units | 14,348,427 | 21,539,688 | 16,086,902 | 20,446,983 |

Revenue from collaborations and licenses

The Company generates revenue through certain collaboration agreements and license agreements. Such agreements may require the Company to deliver various rights and/or services, including intellectual property rights or licenses and research and development services. Under such agreements, the Company is generally eligible to receive non-refundable upfront payments, funding for research and development services, milestone payments and royalties.

The Company's collaboration agreements fall under the scope of Accounting Standards Codification (ASC) Topic 808, *Collaborative Arrangements* (ASC 808), when both parties are active participants in the arrangement and are exposed to significant risks and rewards. For certain arrangements under the scope of ASC 808, the Company analogizes to ASC Topic 606, *Revenue from Contracts with Customers* (ASC 606), for some aspects, including for the delivery of a good or service (i.e., a unit of account).

ASC 606 requires an entity to recognize the amount of revenue to which it expects to be entitled for the transfer of promised goods or services to customers under a five-step model: (i) identify contract(s) with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when or as a performance obligation is satisfied.

In contracts where the Company has more than one performance obligation to provide its customer with goods or services, each performance obligation is evaluated to determine whether it is distinct based on whether (i) the customer can benefit from the good or service either on its own or together with other resources that are readily available and (ii) the good or service is separately identifiable from other promises in the contract. The consideration under the contract is then allocated between the distinct performance obligations based on their respective relative stand-alone selling prices. The estimated stand-alone selling price of each deliverable reflects the Company's best estimate of what the selling price would be if the deliverable was regularly sold on a stand-alone basis and is determined by reference to market rates for the good or service when sold to others or by using an adjusted market assessment approach if the selling price on a stand-alone basis is not available.

The consideration allocated to each distinct performance obligation is recognized as revenue when control is transferred to the customer for the related goods or services. Consideration associated with at-risk substantive performance milestones, including sales-based milestones, is recognized as revenue when it is probable that a significant reversal of the cumulative revenue recognized will not occur. Sales-based royalties received in connection with licenses of intellectual property are subject to a specific exception in the revenue standards, whereby the consideration is not included in the transaction price and recognized in revenue until the customer's subsequent sales or usages occur.

Deferred Revenue

When consideration is received or is unconditionally due from a customer, collaborator or licensee prior to the Company completing its performance obligation to the customer, collaborator or licensee under the terms of a contract, deferred revenue is recorded. Deferred revenue expected to be recognized as revenue within the 12 months following the balance sheet date is classified as a current liability. Deferred revenue not expected to be recognized as revenue within the 12 months following the balance sheet date is classified as a long-term liability. In accordance with ASC Topic 210-20, *Balance Sheet - Offsetting* (ASC 210-20) the Company's deferred revenue is offset by a contract asset as further discussed in Note 9.

Recent accounting pronouncements

In December 2023, the Financial Accounting Standards Board issued Accounting Standards Update (ASU) No. 2023-09, Income Taxes (Topic 740): Improvements to Income Tax Disclosures (ASU 2023-09), which improves income tax disclosures by requiring: (1) consistent categories and greater disaggregation of information in the rate reconciliation, and (2) income taxes paid disaggregated by jurisdiction. It also includes certain other amendments to improve the effectiveness of income tax disclosures. ASU 2023-09 is effective for annual periods beginning after December 15, 2024. Early adoption is permitted. The ASU indicates that all entities will apply the guidance prospectively with an option for retroactive application to each period presented in the financial statements. The Company has not yet determined the impact ASU 2023-09 may have on the Company's financial statement disclosures.

The Company has reviewed all other recently issued standards and has determined that such standards will not have a material impact on the Company's financial statements or do not otherwise apply to the Company's operations.

3. Fair value measurements

The Company measures certain financial instruments and other items at fair value.

To determine the fair value, the Company uses the fair value hierarchy for inputs used in measuring fair value that maximize the use of observable inputs and minimize the use of unobservable inputs by requiring that the most observable inputs be used when available. Observable inputs are inputs market participants would use to value an asset or liability and are developed based on market data obtained from independent sources. Unobservable inputs are inputs based on assumptions about the factors market participants would use to value an asset or liability. The three levels of inputs that may be used to measure fair value are as follows:

- Level 1 inputs are quoted market prices for identical instruments available in active markets.
- Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for the asset or liability either directly or indirectly. If the asset or liability has a contractual term, the input must be observable for substantially the full term. An example includes quoted market prices for similar assets or liabilities in active markets.
- Level 3 inputs are unobservable inputs for the asset or liability and will reflect management's assumptions about market assumptions that would be used to price the asset or liability.

Assets and liabilities are classified based on the lowest level of input that is significant to the fair value measurements. Changes in the observability of valuation inputs may result in a reclassification of levels for certain securities within the fair value hierarchy.

The carrying values of cash and cash equivalents, accounts receivable, accounts payable and accrued liabilities approximate their fair values due to the immediate or short-term maturity of these financial instruments.

To determine the fair value of the contingent consideration (Note 8), the Company uses a probability weighted assessment of the likelihood the milestones would be met and the estimated timing of such payments, and then the potential contingent payments are discounted to their present value using a probability adjusted discount rate that reflects the early stage nature of the development program, the time to complete the program development, and overall biotech indices. The Company determined the fair value of the contingent consideration was \$10.8 million as of June 30, 2025 and the increase of \$0.6 million from December 31, 2024 has been recorded as a component of total operating expenses in the condensed consolidated statements of operations and comprehensive income (loss) for the six months ended June 30, 2025. The assumptions used in the discounted cash flow model are level 3 inputs as defined above. There were no changes in the assumptions as of June 30, 2025 compared to December 31, 2024. The Company assessed the sensitivity of the fair value measurement to changes in these

unobservable inputs, and determined that changes within a reasonable range would not result in a materially different assessment of fair value.

The following tables present information about the Company's assets and liabilities that are measured at fair value on a recurring basis, and indicates the fair value hierarchy of the valuation techniques used to determine such fair value:

| | Level 1 | Level 2 | Level 3 | Total |
|---|-----------|-----------|-----------|-----------|
| As of June 30, 2025 | | | | |
| (in thousands) | | | | |
| Assets | | | | |
| Cash and cash equivalents | \$ 37,412 | \$ — | \$ — | \$ 37,412 |
| Investments in marketable securities, current | — | 60,676 | — | 60,676 |
| Total | \$ 37,412 | \$ 60,676 | \$ — | \$ 98,088 |
| Liabilities | | | | |
| Contingent consideration | \$ — | \$ — | \$ 10,784 | \$ 10,784 |
| Total | \$ — | \$ — | \$ 10,784 | \$ 10,784 |

| | Level 1 | Level 2 | Level 3 | Total |
|---|-----------|-----------|-----------|------------|
| As of December 31, 2024 | | | | |
| (in thousands) | | | | |
| Assets | | | | |
| Cash and cash equivalents | \$ 36,330 | \$ — | \$ — | \$ 36,330 |
| Investments in marketable securities, current | — | 86,293 | — | 86,293 |
| Total | \$ 36,330 | \$ 86,293 | \$ — | \$ 122,623 |
| Liabilities | | | | |
| Contingent consideration | \$ — | \$ — | \$ 10,225 | \$ 10,225 |
| Total | \$ — | \$ — | \$ 10,225 | \$ 10,225 |

The following table presents the changes in fair value of the Company's contingent consideration:

| | Liability at beginning of the period | Change in fair value of liability | Liability at end of the period |
|--------------------------------|--------------------------------------|-----------------------------------|--------------------------------|
| (in thousands) | | | |
| Six Months Ended June 30, 2025 | \$ 10,225 | \$ 559 | \$ 10,784 |
| Six Months Ended June 30, 2024 | \$ 7,600 | \$ 391 | \$ 7,991 |

See Note 4 for additional information regarding the fair value of the Company's investments in marketable securities.

4. Investments in marketable securities

Investments in marketable securities consisted of the following:

| <u>As of June 30, 2025</u> | Amortized Cost | Gross Unrealized Gain ⁽¹⁾ | Gross Unrealized Loss ⁽¹⁾ | Fair Value |
|--|----------------|--------------------------------------|--------------------------------------|------------|
| | (in thousands) | | | |
| Cash equivalents | | | | |
| Money market funds | \$ 30,400 | \$ — | \$ — | \$ 30,400 |
| Total | \$ 30,400 | \$ — | \$ — | \$ 30,400 |
| Investments in marketable short-term securities | | | | |
| US corporate bonds | \$ 11,300 | \$ 9 | \$ — | \$ 11,309 |
| US treasury bills | 47,128 | — | (10) | 47,118 |
| US government bonds | 2,250 | — | (1) | 2,249 |
| Total | \$ 60,678 | \$ 9 | \$ (11) | \$ 60,676 |

⁽¹⁾Gross unrealized gain (loss) is pre-tax and is reported in accumulated other comprehensive income (loss).

| <u>As of December 31, 2024</u> | Amortized Cost | Gross Unrealized Gain ⁽¹⁾ | Gross Unrealized Loss ⁽¹⁾ | Fair Value |
|--|----------------|--------------------------------------|--------------------------------------|------------|
| | (in thousands) | | | |
| Cash equivalents | | | | |
| Money market funds | \$ 29,533 | \$ — | \$ — | \$ 29,533 |
| Total | \$ 29,533 | \$ — | \$ — | \$ 29,533 |
| Investments in marketable short-term securities | | | | |
| US corporate bonds | \$ 30,776 | \$ 27 | \$ (6) | \$ 30,797 |
| US treasury bills | 55,467 | 29 | — | 55,496 |
| Total | \$ 86,243 | \$ 56 | \$ (6) | \$ 86,293 |

⁽¹⁾Gross unrealized gain (loss) is pre-tax and is reported in accumulated other comprehensive income (loss).

The contractual term to maturity of the \$60.7 million of short-term marketable securities held by the Company as of June 30, 2025 is less than one year. As of June 30, 2025, the Company held no long-term marketable securities. As of December 31, 2024, the Company's \$86.3 million of short-term marketable securities had contractual maturities of less than one year, while the Company held no long-term marketable securities.

At June 30, 2025 and December 31, 2024, the Company had 20 and 6, respectively, available-for-sale investment debt securities in an unrealized loss position without an allowance for credit losses. Unrealized losses on the Company's investments in debt securities have not been recognized into income as the issuers' bonds are of high credit quality and the decline in fair value is largely due to market conditions and/or changes in interest rates. The Company does not intend to sell and it is more likely than not that the Company will not be required to sell the securities prior to the anticipated recovery of their amortized cost basis. The issuers continue to make timely interest payments on the bonds. The fair value is expected to recover as the bonds approach maturity.

Accrued interest receivable on investments in marketable securities of \$0.1 million and \$0.3 million at June 30, 2025 and December 31, 2024, respectively, is included in prepaid expenses and other current assets.

The Company had zero realized gains for the three and six months ended June 30, 2025 and less than \$0.1 million realized gains for both the three and six months ended June 30, 2024.

See Note 3 for additional information regarding the fair value of the Company's investments in marketable securities.

5. Investment in Genevant

In April 2018, the Company entered into an agreement with Roivant Sciences Ltd. (Roivant), its largest shareholder, to launch Genevant Sciences Ltd., a company focused on a broad range of ribonucleic acid (RNA)-based therapeutics enabled by the Company's LNP and ligand conjugate delivery technologies. The Company licensed rights to its LNP and ligand conjugate delivery platforms to Genevant for RNA-based applications outside of HBV, except to the extent certain rights had already been licensed to other third parties (the Genevant License). The Company retained all rights to its LNP and conjugate delivery platforms for HBV.

Under the Genevant License, as amended, if a third-party sublicensee of intellectual property licensed by Genevant from the Company commercializes a sublicensed product, the Company becomes entitled to receive a specified percentage of certain revenue that may be received by Genevant for such sublicense, including royalties, commercial milestones and other sales-related revenue, or, if less, tiered low single-digit royalties on net sales of the sublicensed product. The specified percentage is 20% in the case of a mere sublicense (i.e., naked sublicense) by Genevant without additional contribution and 14% in the case of a bona fide collaboration with Genevant. Additionally, if Genevant receives proceeds from an action for infringement by any third parties of the Company's intellectual property licensed to Genevant, the Company would be entitled to receive, after deduction of litigation costs, 20% of the proceeds received by Genevant or, if less, tiered low single-digit royalties on net sales of the infringing product (inclusive of the proceeds from litigation or settlement, which would be treated as net sales).

Notwithstanding the preceding, in March 2025, Genevant and the Company agreed that the Company be entitled to any award of damages in (or any proceeds of settlement of) certain pending patent litigation against Moderna and certain affiliates that specifically accuses Moderna of infringement related to Moderna's vaccine for RSV known as mRESVIA™, and that, in the event there is no such specific allocation to mRESVIA in such award or settlement, the parties will discuss an appropriate allocation in good faith.

The Company accounts for its interest in Genevant as equity securities without readily determinable fair values. Accordingly, an estimate of the fair value of the securities is based on the original cost less previously recognized equity method losses, less impairments, plus or minus changes resulting from observable price changes in orderly transactions for identical or a similar Genevant securities. As of June 30, 2025, the carrying value of the Company's investment in Genevant was zero and the Company owned approximately 16% of the common equity of Genevant.

6. Accounts payable and accrued liabilities

Accounts payable and accrued liabilities are comprised of the following:

| | June 30, 2025 | December 31, 2024 |
|---|-----------------|-------------------|
| | (in thousands) | |
| Trade accounts payable | \$ 1,321 | \$ 2,316 |
| Research and development accruals | 1,092 | 691 |
| Professional fee accruals | 352 | 1,164 |
| Payroll accruals | 975 | 3,393 |
| Restructuring liabilities | 768 | — |
| Total accounts payable and accrued liabilities | \$ 4,508 | \$ 7,564 |

In March 2025, the Company's Board of Directors (the Board) took action to reduce the Company's workforce by 57%. The Board also decided to exit the Company's corporate headquarters in Warminster, Pennsylvania and to discontinue in-house scientific research. As a result, the Company recorded a one-time restructuring charge of \$12.4 million in the first quarter of 2025, of which there was \$0.4 million in severance and benefit costs and \$0.3 million of lease-related operation expenses accrued as of June 30, 2025.

7. Sale of future royalties

On July 2, 2019, the Company entered into a Purchase and Sale Agreement (the Agreement) with the Ontario Municipal Employees Retirement System (OMERS), pursuant to which the Company sold to OMERS part of its royalty interest on future global net sales of ONPATTRO® (Patisiran) (ONPATTRO), an RNA interference therapeutic currently being sold by Alnylam Pharmaceuticals, Inc. (Alnylam).

ONPATTRO utilizes the Company's LNP technology, which was licensed to Alnylam pursuant to the Cross-License Agreement, dated November 12, 2012, by and between the Company and Alnylam (the LNP License Agreement). Under the

terms of the LNP License Agreement, the Company is entitled to tiered royalty payments on global net sales of ONPATTRO ranging from 1.00% to 2.33% after offsets, with the highest tier applicable to annual net sales above \$500 million. This royalty interest was sold to OMERS, effective as of January 1, 2019, for \$20 million in gross proceeds before advisory fees. OMERS will retain this entitlement until it has received \$30 million in royalties, at which point 100% of such royalty interest on future global net sales of ONPATTRO will revert to the Company. OMERS has assumed the risk of collecting up to \$30 million of future royalty payments from Alnylam and the Company is not obligated to reimburse OMERS if it fails to collect any such future royalties.

The \$30 million in royalties to be paid to OMERS is accounted for as a liability, with the difference between the liability and the gross proceeds received accounted for as a discount. The discount, as well as \$1.5 million of transaction costs, will be amortized as interest expense based on the projected balance of the liability as of the beginning of each period. As of June 30, 2025, the Company estimated an effective annual interest rate of approximately 2.5%. Over the course of the Agreement, the actual interest rate will be affected by the amount and timing of royalty revenue recognized and changes in the timing of forecasted royalty revenue. On a quarterly basis, the Company will reassess the expected timing of the royalty revenue, recalculate the amortization and effective interest rate and adjust the accounting prospectively as needed.

The Company recognizes non-cash royalty revenue related to the sales of ONPATTRO during the term of the Agreement. As royalties are remitted to OMERS from Alnylam, the balance of the recognized liability is effectively repaid over the life of the Agreement. From the inception of the royalty sale through June 30, 2025, the Company has recorded an aggregate of \$25.9 million of non-cash royalty revenue for royalties earned by OMERS. There are a number of factors that could materially affect the amount and timing of royalty payments from Alnylam, none of which are within the Company's control.

During the six months ended June 30, 2025, the Company recognized non-cash royalty revenue of \$1.0 million and related non-cash interest expense of less than \$0.1 million. During the six months ended June 30, 2024, the Company recognized non-cash royalty revenue of \$1.2 million and related non-cash interest expense of less than \$0.1 million.

The table below shows the activity related to the net liability for the six months ended June 30, 2025 and 2024:

| | Six Months Ended June 30, | |
|---|---------------------------|----------|
| | 2025 | 2024 |
| | (in thousands) | |
| Net liability related to sale of future royalties - beginning balance | \$ 4,829 | \$ 6,953 |
| Non-cash royalty revenue | (974) | (1,164) |
| Non-cash interest expense | 55 | 70 |
| Net liability related to sale of future royalties - ending balance | \$ 3,910 | \$ 5,859 |

In addition to the royalty from the LNP License Agreement, the Company is also receiving a second royalty interest ranging from 0.75% to 1.125% on global net sales of ONPATTRO, with 0.75% applying to sales greater than \$500 million, originating from a settlement agreement and subsequent license agreement with Acuitas Therapeutics, Inc. (Acuitas). The royalty from Acuitas has been retained by the Company and was not part of the royalty sale to OMERS.

8. Contingencies and commitments

Stock Purchase Agreement with Enantigen

In October 2014, Arbutus Biopharma, Inc., the Company's wholly-owned subsidiary, acquired all of the outstanding shares of Enantigen Therapeutics, Inc. (Enantigen) pursuant to a stock purchase agreement. The amount paid to Enantigen's selling shareholders could be up to an additional \$102.5 million in sales performance milestones in connection with the sale of the first commercialized product by the Company for the treatment of HBV, regardless of whether such product is based upon assets acquired under this agreement, and a low single-digit royalty on net sales of such first commercialized HBV product, up to a maximum royalty payment of \$1.0 million that, if paid, would be offset against the Company's milestone payment obligations. Certain other development milestones related to the acquisition were tied to programs which are no longer under development by the Company, and therefore the contingency related to those development milestones is zero.

The contingent consideration is a financial liability and is measured at its fair value at each reporting period, with any changes in fair value from the previous reporting period recorded in the condensed consolidated statements of operations and comprehensive income (loss) (see Note 3).

The fair value of the contingent consideration was \$10.8 million as of June 30, 2025.

9. Collaborations, contracts and licensing agreements

Collaborations

Qilu Pharmaceutical Co., Ltd.

In December 2021, the Company entered into a technology transfer and licensing agreement (the Qilu License Agreement) with Qilu Pharmaceutical Co., Ltd. (Qilu), pursuant to which the Company granted Qilu a sublicensable, royalty-bearing license, under certain intellectual property owned by the Company, which was non-exclusive as to development and manufacturing and exclusive with respect to commercialization of imdusiran, including pharmaceutical products that include imdusiran, for the treatment or prevention of hepatitis B in China, Hong Kong, Macau and Taiwan (Greater China and Taiwan).

In partial consideration for the rights granted by the Company, Qilu paid the Company a one-time upfront cash payment of \$40.0 million, net of withholding taxes, on January 5, 2022, and agreed to pay the Company up to \$245.0 million, net of withholding taxes, upon the achievement of certain technology transfer, development, regulatory and commercialization milestones. Qilu paid \$4.4 million of withholding taxes to the Chinese taxing authority on the Company's behalf, related to the upfront cash payment. In addition, Qilu agreed to pay the Company double-digit royalties into the low twenties percent based upon annual net sales of imdusiran in Greater China and Taiwan. The royalties were payable on a product-by-product and region-by-region basis, subject to certain limitations.

Qilu was responsible for all costs related to developing, obtaining regulatory approval for, and commercializing imdusiran for the treatment or prevention of hepatitis B in Greater China and Taiwan. Qilu was required to use commercially reasonable efforts to develop, seek regulatory approval for, and commercialize at least one imdusiran product candidate in Greater China and Taiwan. A joint development committee was established between the Company and Qilu to coordinate and review the development, manufacturing and commercialization plans. Both parties also entered into a supply agreement and related quality agreement pursuant to which the Company would manufacture and supply Qilu with all quantities of imdusiran necessary for Qilu to develop and commercialize in Greater China and Taiwan until the Company completed its manufacturing technology transfer to Qilu and Qilu received all approvals required for it or its designated contract manufacturing organization to manufacture imdusiran in Greater China and Taiwan.

Concurrent with the execution of the Qilu License Agreement, the Company entered into a Share Purchase Agreement (the Share Purchase Agreement) with Anchor Life Limited, a company established pursuant to the applicable laws and regulations of Hong Kong and an affiliate of Qilu (the Investor), pursuant to which the Investor purchased 3,579,952 of the Company's common shares at a purchase price of USD \$4.19 per share, which was a 15% premium on the thirty-day average closing price of the common shares as of the close of trading on December 10, 2021 (the Share Transaction). The Company received \$15.0 million of gross proceeds from the Share Transaction on January 6, 2022. The common shares sold to the Investor in the Share Transaction represented approximately 2.5% of the common shares outstanding immediately prior to the execution of the Share Purchase Agreement.

In June 2025, the Company and Qilu mutually agreed to conclude the strategic partnership and terminated the Qilu License Agreement and related agreements, and the Company now once again holds global rights for imdusiran. As no obligations remain under the Qilu License Agreement, the Company recognized all previously deferred revenue of \$9.6 million in the second quarter of 2025.

For the period of time the Qilu License Agreement was effective, it fell under the scope of ASC 808 as both parties were active participants in the arrangement and were exposed to significant risks and rewards. While this arrangement was in the scope of ASC 808, the Company analogized to ASC 606 for some aspects of this arrangement, including for the delivery of a good or service (i.e., a unit of account). In accordance with the guidance, the Company identified the following commitments under the arrangement: (i) rights to develop, use, sell, have sold, offer for sale and import any product comprised of Licensed Product (as defined in the Qilu License Agreement) (the Qilu License) and (ii) drug supply obligations and manufacturing technology transfer (the Manufacturing Obligations). The Company determined that these two commitments were not distinct performance obligations for purposes of recognizing revenue as the manufacturing process is highly specialized and Qilu would not be able to benefit from the Qilu License Agreement without the Company's involvement in the manufacturing activities until the transfer of the manufacturing know-how was complete. As such, the Company combined these commitments into one performance obligation to which the transaction price was allocated and recognized this transaction price associated with the

bundled performance obligation over time using an inputs method based on labor hours expended by the Company on its Manufacturing Obligations.

The Company determined the initial transaction price of the combined performance obligation to be \$50.4 million, which included the \$40.0 million upfront fee, \$4.4 million of withholding taxes paid by Qilu on behalf of the Company, and the premium paid for the Share Transaction of \$4.1 million. The Company determined the milestone payments to be variable consideration subject to constraint at inception. At the end of each subsequent reporting period, the Company reevaluated the probability of achievement of the future development, regulatory, and sales milestones subject to constraint and, if necessary, adjusted its estimate of the overall transaction price. Any such adjustments were recorded on a cumulative catch-up basis, which affect revenues and earnings in the period of adjustment.

The following table outlines the transaction price and the changes to the related liability balance:

| | Transaction Price | Cumulative Collaboration Revenue Recognized | Deferred License Revenue |
|---------------------------------|-------------------|--|--------------------------|
| | (in thousands) | | |
| Combined performance obligation | \$ 50,445 | \$ 50,445 | \$ — |
| Less contract asset | | | — |
| Total deferred license revenue | | | \$ — |

Due to the conclusion of the strategic partnership with Qilu, the Company recognized the remainder of the \$9.6 million of deferred revenue during the three months ended June 30, 2025. The Company also recognized \$0.5 million of revenue based on labor hours expended by the Company on its Manufacturing Obligations during the six months ended June 30, 2025. The Company recognized \$0.5 million and \$0.8 million during the three and six months ended June 30, 2024, respectively, related to labor hours expended.

The Company incurred \$0.6 million of incremental costs in obtaining the Qilu License Agreement, which was capitalized in other current assets and other assets and amortized as a component of general and administrative expense commensurate with the recognition of the combined performance obligation. During the three months ended June 30, 2025, the Company recognized the \$0.1 million remaining amortization expense, for a total amortization expense for the six months ended June 30, 2025 of \$0.2 million. The Company recognized amortization expense of less than \$0.1 million for both the three and six months ended June 30, 2024.

Until the conclusion of the strategic partnership with Qilu, the Company reevaluated the transaction price and the total estimated labor hours expected to be incurred to satisfy the performance obligations and adjusted the deferred revenue at the end of each reporting period, which resulted in changes to the amount of collaboration revenue recognized and deferred revenue.

Barinthus Biotherapeutics plc

In July 2021, the Company entered into a clinical collaboration agreement with Barinthus Biotherapeutics plc (Barinthus), formerly Vaccitech plc, to evaluate imdusiran followed by Barinthus' VTP-300, an HBV immunotherapy, and ongoing nucleos(t)ide analogue therapy in patients with cHBV. This clinical trial was amended to include a treatment arm with the addition of an approved PD-1 monoclonal antibody inhibitor, nivolumab (Opdivo®).

The Company is responsible for managing this Phase 2a proof-of-concept clinical trial, subject to oversight by a joint development committee comprised of representatives from the Company and Barinthus. The Company and Barinthus retain full rights to their respective product candidates and will split all costs associated with the clinical trial. The Company incurred \$0.3 million and \$0.6 million of expenses, net of Barinthus's 50% share, during the three and six months ended June 30, 2025, respectively, and \$0.5 million and \$1.0 million during the three and six months ended June 30, 2024, respectively, and reflected those costs in research and development in the condensed consolidated statements of operations and comprehensive income (loss).

Royalty Entitlements

Alnylam Pharmaceuticals, Inc. and Acuitas Therapeutics, Inc.

The Company has two royalty entitlements to Alnylam's global net sales of ONPATTRO.

In 2012, the Company entered into the LNP License Agreement with Alnylam that entitles Alnylam to develop and commercialize products with the Company's LNP technology. Alnylam launched ONPATTRO, the first approved application of the Company's LNP technology, in 2018. Under the terms of this license agreement, the Company is entitled to tiered royalty payments on global net sales of ONPATTRO ranging from 1.00% - 2.33% after offsets, with the highest tier applicable to annual net sales above \$500 million. This royalty interest was sold to OMERS, effective as of January 1, 2019, for \$20 million in gross proceeds before advisory fees. OMERS will retain this entitlement until it has received \$30 million in royalties, at which point 100% of this royalty entitlement on future global net sales of ONPATTRO will revert back to the Company. OMERS has assumed the risk of collecting up to \$30 million of future royalty payments from Alnylam, and the Company is not obligated to reimburse OMERS if it fails to collect any such future royalties. If this royalty entitlement reverts to the Company, it has the potential to provide an active royalty stream or to be otherwise monetized again in full or in part. From the inception of the royalty sale through June 30, 2025, an aggregate of \$25.9 million of royalties have been earned by OMERS.

The Company also is receiving a second royalty interest of 0.75% to 1.125% on global net sales of ONPATTRO, with 0.75% applying to sales greater than \$500 million, originating from a settlement agreement and subsequent license agreement with Acuitas. This royalty entitlement from Acuitas has been retained by the Company and was not part of the royalty entitlement sale to OMERS.

Revenues are summarized in the following table:

| | Three Months Ended June 30, | | Six Months Ended June 30, | |
|---|-----------------------------|-----------------|---------------------------|-----------------|
| | 2025 | 2024 | 2025 | 2024 |
| | (in thousands) | | (in thousands) | |
| Revenue from collaborations and licenses | | | | |
| Acuitas Therapeutics, Inc. | \$ 591 | \$ 642 | \$ 1,095 | \$ 1,337 |
| Qilu Pharmaceutical Co., Ltd. | 9,622 | 513 | 10,434 | 757 |
| Non-cash royalty revenue | | | | |
| Alnylam Pharmaceuticals, Inc. | 526 | 571 | 974 | 1,164 |
| Total revenue | \$ 10,739 | \$ 1,726 | \$ 12,503 | \$ 3,258 |

10. Shareholders' equity

Authorized share capital

The Company's authorized share capital consists of an unlimited number of common shares and preferred shares, without par value, and 1,164,000 Series A participating convertible preferred shares, without par value.

Open Market Sale Agreement

Effective March 26, 2025, the Company terminated its Open Market Sale Agreement with Jefferies LLC (Jefferies) dated December 20, 2018, as amended (the Sale Agreement), under which the Company could offer and sell common shares, from time to time.

Prior to the termination of the Sale Agreement, the Company did not issue any common shares pursuant to the Sale Agreement during the six months ended June 30, 2025. During the three and six months ended June 30, 2024, the Company issued 7,833,922 and 16,499,999 common shares pursuant to the Sale Agreement, respectively, resulting in net proceeds of \$22.4 million and \$44.1 million, respectively.

Stock-based compensation

The table below summarizes information about the Company's stock-based compensation for the three and six months ended June 30, 2025 and 2024 and the expense recognized in the condensed consolidated statements of operations:

| | Three Months Ended June 30, | | Six Months Ended June 30, | |
|--|---|----------|---------------------------|-----------|
| | 2025 | 2024 | 2025 | 2024 |
| | (in thousands, except share and per share data) | | | |
| Stock options | | | | |
| Options granted during period | 762,400 | 424,200 | 4,706,122 | 4,163,000 |
| Weighted average exercise price | \$ 3.34 | \$ 3.27 | \$ 3.32 | \$ 2.49 |
| Restricted stock units (RSUs) | | | | |
| Restricted stock units granted during period | — | — | 901,900 | 1,316,200 |
| Grant date fair value | \$ — | \$ — | \$ 3.29 | \$ 2.40 |
| Stock compensation expense | | | | |
| Research and development | \$ 374 | \$ 1,119 | \$ 929 | \$ 2,160 |
| General and administrative | 390 | 2,061 | 1,128 | 3,034 |
| Total stock compensation expense | \$ 764 | \$ 3,180 | \$ 2,057 | \$ 5,194 |

11. Segment Reporting

The Company has one reportable segment. The Company's chief operating decision maker is the Chief Executive Officer and President. The accounting policies of the single segment are the same as those described in the summary of significant accounting policies. The chief operating decision maker assesses performance for the single segment and decides how to allocate resources based on net loss that also is reported on the condensed and consolidated statements of operations and comprehensive income (loss) as consolidated net loss. The chief operating decision maker uses net loss to monitor budget versus actual results and to evaluate the overall cash burn of the business.

| | Three Months Ended June 30, | | Six Months Ended June 30, | |
|--|-----------------------------|-------------|---------------------------|-------------|
| | 2025 | 2024 | 2025 | 2024 |
| | (in thousands) | | | |
| Revenue | \$ 10,739 | \$ 1,726 | \$ 12,503 | \$ 3,258 |
| Less: | | | | |
| Research and development employee expense, lab supplies and overhead | 2,297 | 6,908 | 6,733 | 14,008 |
| Imdusiran IM-PROVE I, II & III clinical trials expense | 1,405 | 4,010 | 3,789 | 9,399 |
| AB-101-001 Phase 1a/1b clinical trial expense | 1,738 | 3,186 | 3,637 | 5,996 |
| Other early research and development programs expense | 58 | 1,447 | 298 | 1,551 |
| General and administrative expense | 3,328 | 7,547 | 9,160 | 12,859 |
| Restructuring expense | 165 | — | 12,538 | — |
| Other segment expense ⁽¹⁾ | 267 | 253 | 590 | 490 |
| Add: | | | | |
| Interest income | 1,042 | 1,829 | 2,239 | 3,374 |
| Segment net income (loss) | \$ 2,523 | \$ (19,796) | \$ (22,003) | \$ (37,671) |
| Adjustments and reconciling items | — | — | — | — |
| Consolidated net income (loss) | \$ 2,523 | \$ (19,796) | \$ (22,003) | \$ (37,671) |

(1) Other segment expense includes the change in the fair value of contingent consideration, non-cash interest expenses and foreign currency exchange gains and losses.

12. Restructuring

In March 2025, the Board took action to reduce the Company's workforce by 57%. The Board also decided to exit the Company's corporate headquarters in Warminster, Pennsylvania and to discontinue in-house scientific research. In connection with these actions, the Company incurred a one-time restructuring charge in the first quarter of 2025 of \$12.4 million and \$0.2 million in the second quarter of 2025, which includes approximately \$6.1 million of cash severance and continued benefits paid, \$2.3 million of non-cash expense related to the modification of equity awards, non-cash impairment charges for leasehold improvements and laboratory equipment of \$1.9 million and \$0.9 million, respectively, \$0.9 million related to impairment of the right-of-use asset associated with the lease of the Company's corporate headquarters and a \$0.4 million accrual of lease-related operating expenses.

As of June 30, 2025, there was \$0.4 million of accrued restructuring costs for severance payments and a \$0.3 million accrual of lease-related operating expenses included in accounts payable and accrued liabilities.

13. Related Party Transaction

On August 5, 2025, the Company entered into an agreement with Keith Manchester, M.D. for consulting services regarding the Company's development strategy and its hepatitis B programs. Dr. Manchester served as a member of the Board until February 24, 2025 and is considered a related person due to his service on the Board during the current fiscal year. In connection with this agreement, the Company granted an option to purchase 400,000 common shares to Dr. Manchester, with 5/48ths vesting immediately and the remainder vesting monthly. Vesting of all unvested shares may be accelerated if certain performance conditions are achieved, at the discretion of the Board.

The grant date fair value of the award was calculated using the Black-Scholes option valuation model, and expense will be recognized over the expected service period. The Company will accelerate recognition of any unrecognized expense if and when it becomes probable that the performance conditions will be satisfied.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read the following discussion and analysis by our management of our financial position and results of operations in conjunction with our audited consolidated financial statements and related notes thereto included as part of our Annual Report on Form 10-K for the year ended December 31, 2024 and our unaudited condensed consolidated financial statements for the three and six months ended June 30, 2025. Our consolidated financial statements have been prepared in accordance with United States generally accepted accounting principles and are presented in U.S. dollars.

REFERENCES TO ARBUTUS BIOPHARMA CORPORATION

Throughout this Quarterly Report on Form 10-Q (Form 10-Q), the "Company," "Arbutus," "we," "us," and "our," except where the context requires otherwise, refer to Arbutus Biopharma Corporation and its consolidated subsidiary.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Form 10-Q contains "forward-looking statements" or "forward-looking information" within the meaning of applicable United States and Canadian securities laws (we collectively refer to these items as "forward-looking statements"). Forward-looking statements are generally identifiable by use of the words "believes," "may," "plans," "will," "anticipates," "intends," "budgets," "could," "estimates," "expects," "forecasts," "projects" and similar expressions that are not based on historical fact or that are predictions of or indicate future events and trends, and the negative of such expressions. Forward-looking statements in this Form 10-Q, including the documents incorporated by reference, include statements about, among other things:

- our strategy, future operations, preclinical studies, clinical trials, and prospects;
- our beliefs, plans and expectations regarding our patent infringement lawsuits against Moderna and Pfizer/BioNTech;
- the potential for our product candidates to achieve their desired or anticipated outcomes;
- the expected cost, timing and results of our clinical development plans and clinical trials, including our clinical collaborations with third parties;
- the development and commercialization of a curative combination regimen for chronic hepatitis B infection, a disease of the liver caused by the hepatitis B virus;
- our aim to prevent complications of disease progression, to decrease hepatitis B virus burden by minimizing patient stigma and to address the need for finite and more efficacious hepatitis B virus treatments that further improve long-term outcomes and reduce associated healthcare costs;
- the potential of our product candidates to improve upon the standard of care and contribute to a functional curative combination treatment regimen;
- obtaining necessary regulatory approvals;
- obtaining adequate financing through a combination of financing activities and operations;
- the expected returns and benefits from strategic alliances, licensing agreements, and development collaborations with third parties, and the timing thereof;
- our expectations regarding our technology licensed to third parties, and the timing thereof;
- our anticipated revenue and expense fluctuation and guidance;
- our expectations regarding the timing of announcing data from our ongoing clinical trials;
- our expectations regarding our net cash burn; and
- our expectation for how long we can fund our operations with our existing cash resources,

as well as other statements relating to our future operations, financial performance or financial condition, prospects or other future events. Forward-looking statements appear primarily in the sections of this Form 10-Q entitled "Part I, Item 1-Financial Statements (Unaudited)," and "Part I, Item 2-Management's Discussion and Analysis of Financial Condition and Results of Operations."

Forward-looking statements are based upon current expectations and assumptions and are subject to a number of known and unknown risks, uncertainties and other factors that could cause actual results to differ materially and adversely from those expressed or implied by such statements. Factors that could cause or contribute to such differences include, but are not limited to, those discussed in this Form 10-Q and our Annual Report on Form 10-K for the year ended December 31, 2024 (the Form 10-K), and in particular the risks and uncertainties discussed under "Item 1A-Risk Factors" of this Form 10-Q and the Form 10-K. As a result, you should not place undue reliance on forward-looking statements.

Additionally, the forward-looking statements contained in this Form 10-Q represent our views only as of the date of this Form 10-Q (or any earlier date indicated in such statement). While we may update certain forward-looking statements from time to time, we specifically disclaim any obligation to do so, even if new information becomes available in the future. However, you are advised to consult any further disclosures we make on related subjects in the periodic and current reports that we file with the Securities and Exchange Commission (the SEC).

The foregoing cautionary statements are intended to qualify all forward-looking statements wherever they may appear in this Form 10-Q. For all forward-looking statements, we claim protection of the safe harbor contained in the Private Securities Litigation Reform Act of 1995.

This Form 10-Q also contains estimates, projections and other information concerning our industry, our business, the markets for certain diseases, including data regarding the estimated size of those markets, and the incidence and prevalence of certain medical conditions. Information that is based on estimates, forecasts, projections, market research or similar methodologies is inherently subject to uncertainties and actual events or circumstances may differ materially from events and circumstances reflected in this information. Unless otherwise expressly stated, we obtained this industry, business, market and other data from reports, research surveys, studies and similar data prepared by market research firms and other third parties, industry, medical and general publications, government data and similar sources.

OVERVIEW

Arbutus Biopharma Corporation (“Arbutus”, the “Company”, “we”, “us”, and “our”) is a clinical-stage biopharmaceutical company focused on infectious disease. We are currently developing imdusiran (AB-729), our proprietary, GalNAc-conjugated, subcutaneously-delivered ribonucleic acid interference (RNAi) therapeutic, and AB-101, our proprietary oral PD-L1 inhibitor, for the treatment of chronic hepatitis B (cHBV).

We continue to protect and defend our intellectual property, which is the subject of our ongoing lawsuits against Moderna Therapeutics, Inc. (Moderna) and against Pfizer Inc. and BioNTech SE (collectively, Pfizer/BioNTech) for their use of our patented lipid nanoparticle (LNP) delivery technology in their COVID-19 messenger ribonucleic acid interference (mRNA)-LNP vaccines. With respect to the Moderna lawsuit in the United States, the summary judgment phase of the case began in July 2025 and a trial date has been set for March 2026. In March 2025, we, along with Genevant Sciences GmbH and/or its affiliates (collectively, Genevant), filed five international lawsuits against Moderna in connection with the use of our LNP technology in Moderna’s COVID-19 mRNA-LNP vaccines and, in the Unified Patent Court, also other Moderna products that use the same LNP technology, including Moderna’s respiratory syncytial virus (RSV) vaccines. The first major hearings in the international lawsuits are expected in the first half of calendar year 2026. With respect to the Pfizer/BioNTech lawsuit, the claim construction hearing occurred in December 2024, and fact discovery is ongoing. The court has not provided guidance for the timing of its ruling in the claim construction hearing, which could potentially come in 2025.

During 2024, we streamlined the organization to focus our efforts on advancing the clinical development of imdusiran and AB-101, and therefore ceased all discovery efforts, discontinued our IM-PROVE III clinical trial and reduced our workforce by 40%. In the first quarter of 2025, we announced the appointment of five new members of our Board of Directors (our Board) to replace all of the former directors, as well as the appointment of a new President, Chief Executive Officer and Chairperson of our Board and a new Chief Financial Officer. Additionally, our Board took action to reduce our workforce by an additional 57%. Our Board also decided to exit our corporate headquarters in Warminster, Pennsylvania and to discontinue in-house scientific research. In connection with these actions, we incurred a one-time restructuring charge in the first quarter of 2025 of \$12.4 million. With these organizational changes and our ongoing cost management efforts, we expect to significantly reduce our net cash burn in 2025 when compared to 2024.

In June 2025, we launched a new Scientific Advisory Board (SAB) consisting of globally-recognized leaders in the treatment of cHBV with extensive experience in late-stage clinical trials. SAB members will advise us on the strategic evaluation of our cHBV pipeline.

In August 2025, we announced changes to our Board. Effective August 4, 2025, Anuj Hasija resigned from our Board due to his transition to a full-time executive role that precludes his participation on our Board and other boards of directors. Dr. Roger Sawhney was appointed to the vacant seat on our Board, effective August 4, 2025. Dr. Sawhney was also appointed as a member of our Board’s Audit Committee and Corporate Governance and Nominating Committee.

Strategy

Our strategy is focused on maximizing opportunities for our cHBV development programs and our in-house developed LNP delivery technology.

LNP delivery technology

In February 2022 and April 2023, we filed patent infringement lawsuits in the United States against Moderna and Pfizer/BioNTech, respectively, seeking compensation for their unlicensed use of our patented technologies in their COVID-19 mRNA-LNP vaccines. It is well established in the scientific literature that the most significant technological hurdle to developing and deploying medicines using mRNA is engineering a safe and effective way to deliver the mRNA to human cells. Scientists at Arbutus and Genevant have spent years developing and refining LNP delivery technology, which has been licensed for various applications to many different third parties. Our and Genevant’s LNP technology relies on microscopic particles built from four carefully selected types of fat-like molecules to shelter and protect ribonucleic acid (RNA) molecules. With this technology, the RNA can travel through the human body to a target cell and through the target cell’s membrane before releasing the RNA. Without this crucial delivery technology, the RNA would quickly degrade in the body and be ineffective. We remain committed to taking all legal actions necessary to defend and protect our intellectual property.

With respect to the Moderna lawsuit in the United States, the court provided its claim construction ruling in April 2024 in which it construed the disputed claim terms and agreed with our position on most of the disputed claim terms. The summary judgment phase of the case began in July 2025 and a trial date has been set for March 2026. In March 2025, we, along with Genevant, filed five international lawsuits against Moderna in connection with Moderna's use of our LNP technology in Moderna's COVID-19 mRNA-LNP vaccines and, in the Unified Patent Court, also other Moderna products that use the same LNP technology, including Moderna's RSV vaccines. The first major hearings in the international lawsuits are expected in the first half of calendar year 2026. With respect to the Pfizer/BioNTech lawsuit, the claim construction hearing occurred in December 2024, and fact discovery is ongoing. The court has not provided guidance for the timing of its ruling in the claim construction hearing, which could potentially come in 2025.

cHBV programs

Our current HBV strategy is to develop a functional cure for patients with cHBV infection with imdusiran as a potential cornerstone in a combination therapy. We believe that a combination of compounds that can suppress hepatitis B virus deoxyribonucleic acid (HBV DNA) replication and hepatitis B surface antigen (HBsAg) expression, as well as boost patients' HBV-specific immune response, could address the most important elements to achieving a functional cure. Functional cure is defined as sustained HBsAg loss and HBV DNA less than the lower limit of quantification (<LLOQ) after 24 weeks off treatment, with or without anti-hepatitis B surface antibodies (anti-HBs). By providing a functional cure for patients with cHBV, we aim to prevent complications of disease progression, to decrease HBV burden by minimizing patient stigma and to address the need for finite and more efficacious HBV treatments that further improve long-term outcomes and reduce associated healthcare costs.

Our HBV product pipeline includes the following:

- Imdusiran (AB-729) is our proprietary, GalNAc-conjugated, subcutaneously-delivered RNAi therapeutic product candidate that suppresses all HBV antigens, including HBsAg, which is thought to be a key prerequisite to enable reawakening of a patient's immune system to respond to HBV. Over 250 patients with cHBV infection have been dosed with imdusiran in our Phase 1 and Phase 2a clinical trials. Clinical data generated thus far has shown imdusiran provides meaningful reductions in HBsAg and HBV DNA and leads to functional cure in some patients, while being generally safe and well-tolerated. To date, eight patients have achieved functional cure, off all treatment, in combination therapy that includes imdusiran, including two patients who did not receive any pegylated interferon alfa-2a (IFN) as part of the combination therapy.
- AB-101 is our proprietary oral PD-L1 inhibitor that has the potential to reawaken patients' HBV-specific immune response by inhibiting PD-L1. AB-101 is currently in a Phase 1a/1b clinical trial (AB-101-001) evaluating the safety, tolerability, pharmacokinetics (PK), and pharmacodynamics (PD) of single- and multiple-ascending oral doses in healthy subjects and patients with cHBV infection. The data from healthy subjects in Parts 1 and 2 and cHBV patients to date in Part 3 of this clinical trial have showed that AB-101 was generally well-tolerated with evidence of high receptor occupancy.

To help position imdusiran as a potential cornerstone in a combination therapy, we fully enrolled two Phase 2a clinical trials that combined imdusiran with other agents. The intent of these trials was to initially lower HBsAg levels with imdusiran and then administer a complementary agent, an immune modulator or a therapeutic vaccine, to further lower HBsAg levels and promote anti-HBV immunity. We believe that if we can lower HBsAg and promote immunity, we may achieve sustained HBsAg loss and HBV DNA <LLOQ, potentially leading to a functional cure in many patients with cHBV.

To date, we have reported a total of eight patients with cHBV who have been functionally cured following treatment with imdusiran and ongoing nucleos(t)ide analogue (NA) therapy in combination with either IFN or with low dose nivolumab plus an immunotherapeutic. Two of the patients who achieved functional cure did not receive any IFN as part of the combination therapy. Seven of the eight patients who achieved functional cure had HBsAg less than 1000 IU/mL at baseline. According to the literature, patients with HBsAg levels <1000 IU/mL represent a significant portion of the cHBV population.

Our imdusiran development program includes the following two Phase 2a clinical trials:

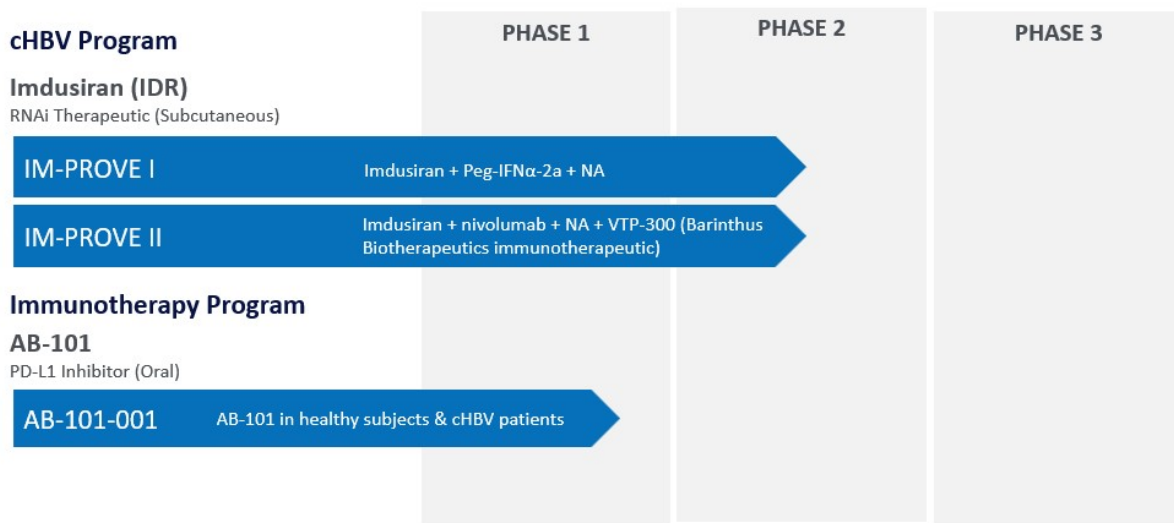
- Imdusiran in combination with IFN, a standard-of-care immunomodulator, and ongoing standard-of-care NA therapy in patients with cHBV infection (IM-PROVE I). At the American Association for the Study of Liver Diseases (AASLD) – The Liver Meeting[®] in November 2024, we presented new data from our IM-PROVE I Phase 2a clinical trial showing that six doses of imdusiran and 24 weeks of IFN added to ongoing NA therapy led to a functional cure rate of 50% (3/6) in hepatitis B e antigen (HBeAg) negative patients with baseline HBsAg levels less than 1000 IU/

mL, and an overall functional cure rate of 25% (3/12). Additionally, three cHBV patients from other cohorts in the IM-PROVE I clinical trial achieved functional cure. Those patients who achieved a functional cure also seroconverted. These data from the IM-PROVE I trial suggest that the combination of imdusiran, 24 weeks of IFN and NA therapy was generally safe and well-tolerated.

- Imdusiran in combination with VTP-300, Barinthus Biotherapeutics plc's (Barinthus) HBV immunotherapy, ongoing NA therapy in patients with cHBV infection, including a cohort with the addition of low dose nivolumab (Opdivo®) (IM-PROVE II). At the European Association for the Study of the Liver (EASL) Congress in May 2025, we presented data from this clinical trial showing that 25% (2/8) of the patients with low dose nivolumab added to the treatment regimen and with baseline HBsAg levels less than 1000 IU/mL achieved functional cure. These data from the IM-PROVE II trial suggest that the combination of imdusiran, VTP-300, NA therapy and low dose nivolumab was generally safe and well-tolerated.

Our Product Candidates

Our pipeline consists of two product candidates that are designed to suppress HBV DNA, reduce HBsAg and/or boost HBV-specific immune responses, as follows:



We continue to explore pipeline opportunities in the form of potential strategic alliances.

RNAi therapeutic (imdusiran, AB-729)

RNAi therapeutics represent a significant advancement in drug development. RNAi therapeutics utilize a natural pathway within cells to effectively silence genes by eliminating the disease-causing proteins that they code for. We are developing an RNAi therapeutic, imdusiran, that is designed to reduce HBsAg and other HBV antigen expression in people with cHBV infection. Reducing HBsAg is widely believed to be a key prerequisite to enable a patient's immune system to reawaken and respond against the virus.

Imdusiran has the following advantages over other RNAi therapeutics in development for cHBV infection:

- Targeted to hepatocytes using our proprietary covalently conjugated GalNAc delivery technology which provides highly efficient liver-targeted uptake and enables subcutaneous dosing.
- Unique nucleotide sequence that is single trigger and targets all HBV transcripts including HBx from cccDNA and integrated HBV DNA.
- Specific chemical modifications and unique asymmetric RNA structure that reduces off-target effects while maintaining/enhancing potency and providing durable liver exposure and in vivo efficacy.

- Delivered at a lower dose and less frequently.
- Immune activation properties with HBV-specific T-cell immune restoration and a decrease in exhausted T-cells in key responder patients.
- In combination with IFN and NA therapy, has achieved the highest functional cure rates in cHBV patients to date with a 50% (3/6) functional cure rate in patients with HBsAg<1000 IU/mL at baseline.
- Achieved a 25% (2/8) functional cure rate in patients with HBsAg<1000 IU/mL at baseline in an IFN-free treatment regimen consisting of imdusiran, VTP-300, ongoing NA therapy and low dose nivolumab.

IM-PROVE I Phase 2a proof-of-concept clinical trial evaluating imdusiran in combination with IFN

We have completed enrollment in IM-PROVE I, a randomized, open label, multicenter Phase 2a proof-of-concept clinical trial investigating the safety and antiviral activity of imdusiran in combination with a short course of IFN and ongoing NA therapy in 43 stably NA-suppressed, HBeAg negative, non-cirrhotic patients with cHBV infection. The primary objective of this trial was to initially lower HBsAg levels with imdusiran and then administer IFN as an immunomodulator to promote anti-HBV immune reawakening. We believe that if we can lower HBsAg and promote immune reawakening, we may achieve sustained HBsAg loss and HBV DNA <LLOQ, potentially leading to a functional cure. After 24-weeks of dosing with imdusiran (60mg every 8 weeks, 4 doses) plus ongoing NA therapy, patients were randomized into one of four cohorts to receive a short course of IFN plus ongoing NA therapy for either 12 or 24 weeks, with or without up to two additional doses of imdusiran. After completion of the assigned IFN treatment period, all patients remained on NA therapy for the initial 24-week follow-up period, and then discontinued NA treatment, provided they met protocol-defined stopping criteria. Patients who stopped NA therapy entered an intensive follow-up period for 48 weeks.

Select key data from 12 patients in Cohort A1 of this Phase 2a clinical trial who received 6 doses of imdusiran, 24 weeks of IFN and ongoing NA therapy, as presented at the AASLD – The Liver Meeting in November 2024, include:

- 50% (3/6) of patients with baseline HBsAg <1000 IU/mL achieved a functional cure.
- Overall, 25% (3/12) of patients achieved a functional cure.
- Those patients that achieved a functional cure also seroconverted with anti-HBs levels increasing as patients lost HBsAg.

At the EASL Congress in May 2025, we presented a poster characterizing the demographics and virological markers of the six cHBV patients across dosing cohorts in the IM-PROVE I Phase 2a clinical trial who achieved functional cure. The data showed that HBsAg at baseline was the only apparent marker in common associated with functional cure. In a second poster, we reported that patients who achieved functional cure in the 24-week IFN treatment cohorts experienced HBsAg loss that was associated with transient HBV RNA elevations that were preceded by or coincided with increases in immunological markers.

These data from the IM-PROVE I trial suggest that the combination of imdusiran and 24 weeks of IFN was generally safe and well-tolerated. There were no serious adverse events related to imdusiran, IFN or NA therapy, and no adverse events leading to discontinuation. The most common imdusiran-related treatment emergent adverse events (TEAEs) were transient alanine aminotransferase elevations and injection site bruising. The IFN-related TEAEs were consistent with the known safety profile of IFN.

IM-PROVE II Phase 2a proof-of-concept clinical trial evaluating imdusiran in combination with Barinthus' VTP-300

Through a clinical collaboration agreement with Barinthus that we entered into in July 2021, we have completed enrollment in IM-PROVE II, a Phase 2a proof-of-concept clinical trial evaluating the safety, antiviral activity and immunogenicity of a combination treatment with Barinthus' VTP-300, an HBV immunotherapy, administered after imdusiran in patients with cHBV infection. The initial trial design enrolled 40 NA-suppressed, HBeAg negative or positive, non-cirrhotic cHBV infected patients. The primary objective of this trial was to initially lower HBsAg levels with imdusiran and then administer VTP-300 as an immunomodulator to promote anti-HBV immune reawakening. All patients received imdusiran (60mg every 8 weeks, 4 doses) plus NA therapy for 24 weeks. After week 24, treatment with imdusiran was stopped. Patients continued only on NA therapy and were randomized to receive VTP-300 or placebo at week 26 and week 30. At week 48, all patients were evaluated for eligibility to discontinue NA therapy and are being followed for an additional 24 to 48 weeks. Subsequently, we amended the IM-PROVE II clinical trial protocol to include another cohort that received imdusiran, VTP-300, NA therapy and low dose nivolumab, an approved PD-1 inhibitor in oncology. In this additional cohort, patients received imdusiran (60mg every 8 weeks, 4 doses) plus NA therapy for 24 weeks, followed by administration of VTP-300 plus up to two low doses of nivolumab

while remaining on NA therapy. At week 48, all patients were evaluated for eligibility to discontinue NA therapy, and are being followed for an additional 24 to 48 weeks.

The cohort that included low dose nivolumab was the best performing cohort in the IM-PROVE II clinical trial. At the AASLD – The Liver Meeting in November 2024, we presented data from this clinical trial showing that the addition of low dose nivolumab increased rates of HBsAg loss in cHBV patients and that 23% (3/13) of patients who received the treatment regimen with low dose nivolumab achieved HBsAg loss by week 48. At the EASL Congress in May 2025, we presented data showing that 25% (2/8) of patients with low dose nivolumab added to the treatment regimen and with baseline HBsAg<1000 IU/mL achieved functional cure. Treatment with imdusiran, VTP-300, NA therapy and low dose nivolumab in this clinical trial was generally safe and well-tolerated. There were no serious adverse events, Grade 3 or 4 adverse events, immune-related adverse events, or discontinuations due to adverse events.

The IM-PROVE II clinical trial is being managed by us, subject to oversight by a joint development committee comprised of representatives from both companies. We and Barinthus retain full rights to our respective product candidates and are splitting all costs associated with the clinical trial. Pursuant to the agreement, the parties could have undertaken a larger Phase 2b clinical trial depending on the results of the initial Phase 2a clinical trial. However, in January 2025, Barinthus announced a shift in its strategic business focus that included postponing further development of VTP-300 after its ongoing VTP-300 clinical trials have concluded. The parties do not intend to undertake a larger Phase 2b with this combination treatment regimen.

Oral PD-L1 Inhibitor (AB-101)

PD-L1 inhibitors complement our pipeline of agents and could potentially be an important part of a combination therapy for the treatment of HBV by reawakening the immune system. Highly functional HBV-specific T-cells within our immune system are believed to be required for long-term HBV viral resolution. However, HBV-specific T-cells become functionally defective, and greatly reduced in number during cHBV infection. One approach to boost HBV-specific T-cells is to prevent PD-L1 proteins from binding to PD-1, which would otherwise lead to inhibition of the HBV-specific immune function of T-cells.

AB-101 is our proprietary oral small-molecule PD-L1 inhibitor candidate that we believe will allow for controlled checkpoint blockade while minimizing the systemic safety issues often seen with checkpoint inhibitor antibody therapies. AB-101 is differentiated from monoclonal antibody checkpoint inhibitors such as durvalumab (anti-PD-L1) and nivolumab (anti-PD-1) because it is liver centric, has a much shorter duration of effect in preclinical models (which may provide dosing and safety advantages), and has a novel mechanism of action as it binds to PD-L1 on the surface of cells causing dimerization, internalization and degradation of the PD-L1 protein.

Phase 1a/1b clinical trial to evaluate safety, tolerability and PK/PD of AB-101 (AB-101-001)

AB-101-001 is a Phase 1a/1b clinical trial designed to investigate the safety, tolerability and PK/PD of single and multiple-ascending oral doses of AB-101 for up to 28 days in healthy subjects and patients with cHBV infection. The trial consists of three parts starting with single ascending doses in healthy subjects, followed by multiple ascending doses in healthy subjects and culminating with multiple doses in patients with cHBV infection. Safety and PK/PD assessments are performed prior to dose escalation in all parts of the clinical trial.

Part 1 of this clinical trial enrolled five sequential cohorts of eight healthy subjects each (6 active: 2 placebo) receiving a single dose of AB-101 at increasing dose levels. In Part 1, all five evaluable subjects in the 40mg cohort showed evidence of 100% receptor occupancy. Part 2 of this clinical trial enrolled three sequential cohorts of ten healthy subjects that each received 10, 25 or 40mg of AB-101 (8 active: 2 placebo) daily for seven days. In Part 2, all subjects in the 40mg cohort showed evidence of high receptor occupancy between 74-100%, with six of the eight subjects demonstrating 100% receptor occupancy during the seven-day dosing period. Across Parts 1 and 2, eleven of the thirteen evaluable healthy subjects that received either single or multiple doses of 40mg of AB-101 achieved 100% receptor occupancy. The data from Part 1 and Part 2 showed that AB-101 was well-tolerated with evidence of high receptor occupancy.

We have moved into Part 3 of this clinical trial which evaluates repeat doses of AB-101 for 28 days in patients with cHBV. At the EASL Congress in May 2025, we presented data showing that a single dose of 10mg of AB-101 for 28 days in cHBV patients was well tolerated with PD-L1 receptor occupancy similar to that seen in healthy subjects at this dose. Treatment with AB-101 in Part 3 of this clinical trial was generally safe and well-tolerated. There were no serious adverse events or early discontinuations due to AB-101 and no evidence of liver dysfunction to date. Part 3 of this clinical trial is ongoing.

Other Collaborations, Royalty Entitlements and Intellectual Property Litigation

Collaboration with Qilu Pharmaceutical Co., Ltd. (Qilu)

In December 2021, we entered into a technology transfer and license agreement (the Qilu License Agreement) with Qilu, pursuant to which we granted Qilu a sublicensable, royalty-bearing license, under certain intellectual property owned by us, which was non-exclusive as to development and manufacturing and exclusive with respect to commercialization of imdusiran, including pharmaceutical products that include imdusiran, for the treatment or prevention of hepatitis B in China, Hong Kong, Macau and Taiwan (Greater China and Taiwan).

In partial consideration for the rights granted by us, Qilu paid us a one-time upfront cash payment of \$40 million on January 5, 2022 and agreed to pay us up to \$245 million, net of withholding taxes, upon the achievement of certain technology transfer, development, regulatory and commercialization milestones. Qilu also agreed to pay us double-digit royalties into the low twenties percent based upon annual net sales of imdusiran in Greater China and Taiwan. The royalties were to be payable on a product-by-product and region-by-region basis, subject to certain limitations.

Qilu was responsible for all costs related to developing, obtaining regulatory approval for, and commercializing imdusiran for the treatment or prevention of hepatitis B in Greater China and Taiwan. Qilu was required to use commercially reasonable efforts to develop, seek regulatory approval for, and commercialize at least one imdusiran product candidate in Greater China and Taiwan. A joint development committee was established between us and Qilu to coordinate and review the development, manufacturing and commercialization plans. Both parties also entered into a supply agreement and related quality agreement pursuant to which we would manufacture and supply Qilu with all quantities of imdusiran necessary for Qilu to develop and commercialize in Greater China and Taiwan until we had completed manufacturing technology transfer to Qilu and Qilu had received all approvals required for it or its designated contract manufacturing organization to manufacture imdusiran in Greater China and Taiwan.

Concurrent with the execution of the Qilu License Agreement, we entered into a Share Purchase Agreement (the Share Purchase Agreement) with Anchor Life Limited, a company established pursuant to the applicable laws and regulations of Hong Kong and an affiliate of Qilu (the Investor), pursuant to which the Investor purchased 3,579,952 of our common shares at a purchase price of USD \$4.19 per share, which was a 15% premium on the thirty-day average closing price of our common shares as of the close of trading on December 10, 2021 (the Share Transaction). We received \$15.0 million of gross proceeds from the Share Transaction on January 6, 2022. The common shares sold to the Investor in the Share Transaction represented approximately 2.5% of our common shares outstanding immediately prior to the execution of the Share Purchase Agreement.

In June 2025, we and Qilu mutually agreed to conclude our strategic partnership and terminate the Qilu License Agreement and related agreements, and we now once again hold global rights for imdusiran. As no obligations remain under the Qilu License Agreement, we recognized all previously deferred revenue in the second quarter of 2025.

Alnylam Pharmaceuticals, Inc. (Alnylam) and Acuitas Therapeutics, Inc. (Acuitas)

We have two royalty entitlements to global net sales of ONPATTRO[®] (Patisiran) (ONPATTRO), an RNA interference therapeutic currently being sold by Alnylam.

In 2012, we entered into a license agreement with Alnylam that entitles Alnylam to develop and commercialize products with our LNP delivery technology. Alnylam's ONPATTRO, which represents the first approved application of our LNP technology, was approved by the FDA and the European Medicines Agency (EMA) during the third quarter of 2018 and was launched by Alnylam immediately upon approval in the United States. Under the terms of this license agreement, we are entitled to tiered royalty payments on global net sales of ONPATTRO ranging from 1.00% - 2.33% after offsets, with the highest tier applicable to annual net sales above \$500 million. This royalty interest was sold to the Ontario Municipal Employees Retirement System (OMERS), effective as of January 1, 2019, for \$20 million in gross proceeds before advisory fees. OMERS will retain this entitlement until it has received \$30 million in royalties, at which point 100% of this royalty entitlement on future global net sales of ONPATTRO will revert to us. OMERS has assumed the risk of collecting up to \$30 million of future royalty payments from Alnylam and we are not obligated to reimburse OMERS if it fails to collect any such future royalties. If this royalty entitlement reverts to us, it has the potential to provide an active royalty stream or to be otherwise monetized again in full or in part. From the inception of the royalty sale through June 30, 2025, an aggregate of \$25.9 million of royalties have been earned by OMERS.

We also have rights to a second royalty interest ranging from 0.75% to 1.125% on global net sales of ONPATPRO, with 0.75% applying to sales greater than \$500 million, originating from a settlement agreement and subsequent license agreement with Acuitas. This royalty entitlement from Acuitas has been retained by us and was not part of the royalty entitlement sale to OMERS.

Genevant Sciences, Ltd.

In April 2018, we entered into an agreement with Roivant Sciences Ltd. (Roivant), our largest shareholder, to launch Genevant Sciences Ltd., a company focused on nucleic acid- and gene editing-based therapeutics enabled by our LNP and ligand conjugate delivery technologies. We licensed rights to our LNP and ligand conjugate delivery platforms to Genevant outside of HBV, except to the extent certain rights had already been licensed to other third parties (the Genevant License). We retained all rights to our LNP and conjugate delivery platforms for HBV.

Under the Genevant License, as amended, if a third-party sublicensee of intellectual property licensed by Genevant from us commercializes a sublicensed product, we become entitled to receive a specified percentage of certain revenue that may be received by Genevant for such sublicense, including royalties, commercial milestones and other sales-related revenue, or, if less, tiered low single-digit royalties on net sales of the sublicensed product. The specified percentage is 20% in the case of a mere sublicense (i.e., naked sublicense) by Genevant without additional contribution and 14% in the case of a bona fide collaboration with Genevant.

Additionally, if Genevant receives proceeds from an action for infringement by any third parties of our intellectual property licensed to Genevant, we would be entitled to receive, after deduction of litigation costs, 20% of the proceeds received by Genevant or, if less, tiered low single-digit royalties on net sales of the infringing product (inclusive of the proceeds from litigation or settlement, which would be treated as net sales).

Notwithstanding the preceding, in March 2025, we and Genevant agreed that we would be entitled to any award of damages in (or any proceeds of settlement of) certain pending patent litigation against Moderna and certain affiliates that specifically accuses Moderna of infringement related to Moderna's vaccine for RSV known as mRESVIA™, and that, in the event there is no such specific allocation to mRESVIA in such award or settlement, the parties will discuss an appropriate allocation in good faith.

In July 2020, Roivant recapitalized Genevant through an equity investment and conversion of previously issued convertible debt securities held by Roivant. We participated in the recapitalization of Genevant with an equity investment of \$2.5 million. In connection with the recapitalization, the three parties entered into an Amended and Restated Shareholders Agreement that provides Roivant with substantial control of Genevant. We have the right to have a non-voting observer attend meetings of Genevant's Board of Directors.

As of June 30, 2025, we owned approximately 16% of the common equity of Genevant and the carrying value of our investment in Genevant was zero. Our entitlement to receive future royalties or sublicensing revenue from Genevant was not impacted by the recapitalization.

United States:

On February 28, 2022, we and Genevant filed a lawsuit in the U.S. District Court for the District of Delaware against Moderna, Inc. and a Moderna affiliate (collectively, Moderna) seeking damages for infringement of U.S. Patent Nos. 8,058,069, 8,492,359, 8,822,668, 9,364,435, 9,504,651, and 11,141,378 in the manufacture and sale of mRNA-1273, Moderna's vaccine for COVID-19. The patents relate to nucleic acid-lipid particles and lipid vesicles, as well as compositions and methods for their use. In the lawsuit, we seek fair compensation for Moderna's use of our patented technology that was developed with great effort and at great expense, without which Moderna's COVID-19 vaccine would not have been successful. In May 2022, Moderna filed a partial motion to dismiss the claims "relating to Moderna's sale and provision of COVID-19 vaccine doses to the U.S. Government" and argued that U.S. taxpayers, not Moderna, are financially liable for any infringement by Moderna of our patents. In November 2022, the court issued an Order denying Moderna's motion. In February 2023, the U.S. Department of Justice filed a Statement of Interest in the action. Subsequently in February 2023, the court held a hearing and directed the parties and the U.S. Government to submit letters regarding the impact of the Government's Statement of Interest on Moderna's motion to dismiss. In March 2023, the court reaffirmed its denial of Moderna's motion to dismiss. The claim construction hearing was held in February 2024, and in April 2024, the court issued its opinion regarding the claims construction. The court agreed with both of our positions regarding the Composition of Total Lipid ('069) Patent that: (i) the claimed molar percentage (mol. %) ranges can be met by any particle and is not limited to "finished" particles that are not subjected to further process steps; and (ii) that the claimed mol. % ranges include standard variation based on the number of significant figures recited in the claim. The court also agreed with our position regarding the Cationic Lipid with Protonatable Tertiary Amine ('378) Patent that there is no limitation as to the mol. % of the claimed cationic lipid. Regarding the Encapsulation of mRNA ('651) Patent, the court held that "wherein at least 70% / at least 80% / about 90% of the mRNA in the formulation is fully encapsulated in the lipid vesicles" means "wherein at least 70% / at least 80% / about 90% of the mRNA is fully, as distinct from partially, contained inside the lipid vesicles". Fact discovery has been completed, and expert discovery is concluding. The summary judgment phase of the case began in July 2025 and a jury trial is scheduled to be held in March 2026. Additionally, in July 2025, the case was reassigned to a different judge in the same court.

International:

On March 3, 2025, we and Genevant filed five international lawsuits against Moderna seeking to enforce patents protecting our patented lipid nanoparticle technology. These five lawsuits target alleged infringing activities by Moderna in 30 countries, including Austria, Belgium, Bulgaria, Canada, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Latvia, Lithuania, Luxembourg, Malta, Monaco, Netherlands, Norway, Poland, Portugal, Romania, Slovenia, Spain, Sweden, Switzerland/Liechtenstein, and Turkey. We and Genevant are seeking monetary relief and injunctions against the continued manufacture and sale of Moderna's COVID-19 vaccine and, in the Unified Patent Court, additional Moderna products, which Moderna has represented use the same lipid nanoparticle technology as the COVID-19 vaccine, including its RSV vaccine. Where permitted to do so at this stage, we and Genevant submitted evidence from testing of commercial Moderna product samples sourced from the U.S. and European Union indicating the samples contain lipid nanoparticles falling under the protective scope of the claims of our lipid composition patents. The five international lawsuits are as follows:

- Canada: Federal Court of Canada File No. T-704-25, seeking a permanent injunction and damages or, if Genevant so elects, an accounting of Moderna's profits, attributable to infringement of Canadian Patent No. 2,721,333.
- Japan: Tokyo District Court Case No. 2025 (Wa) 70079, seeking a permanent injunction and reasonable royalty for infringement of Japanese Patent No. 5,475,753.
- Switzerland: a case seeking a permanent injunction and monetary relief, which upon later choice of Genevant and Arbutus can include surrender of profits, damages or a reasonable royalty, for infringement of EP 2 279 254.
- Unified Patent Court: Case 10280/2025, seeking permanent and provisional injunctions, as well as monetary damages, which can include recovery of Moderna's unfair profits, from infringement of EP 2 279 254.
- Unified Patent Court: Case 10280/2025, seeking permanent and provisional injunctions, as well as monetary damages, which can include recovery of Moderna's unfair profits, from infringement of EP 4 241 767.

The five complaints have been or are being served on Moderna pursuant to the service of process rules of the respective courts. Moderna and/or its affiliates have responded to the lawsuits in Japan, Switzerland and the Unified Patent Court, and the first major hearings are expected to occur in the first half of calendar year 2026.

Patent Infringement Litigation vs. Pfizer and BioNTech

On April 4, 2023, we and Genevant filed a lawsuit in the U.S. District Court for the District of New Jersey against Pfizer Inc. (Pfizer) and BioNTech SE (BioNTech) seeking damages for infringement of U.S. Patent Nos. 9,504,651; 8,492,359; 11,141,378; 11,298,320; and 11,318,098 in the manufacture and sale of any COVID-19 mRNA-LNP vaccines. The patents relate to nucleic acid-lipid particles and their composition, manufacture, delivery and methods of use. In the lawsuit, we seek fair compensation for Pfizer's and BioNTech's use of our patented technology that was developed with great effort and at great expense, without which their COVID-19 mRNA-LNP vaccines would not have been successful. The claim construction hearing occurred in December 2024, and fact discovery is ongoing. The court has not provided guidance for the timing of its ruling in the claim construction hearing, which could potentially come in 2025.

Moderna and Merck European Oppositions

On April 5, 2018, Moderna and Merck, Sharp & Dohme Corporation (Merck) filed Notices of Opposition to Arbutus' European patent EP 2279254 (the '254 Patent) with the European Patent Office (EPO), requesting that the '254 Patent be revoked in its entirety for all contracting states. We filed a response to Moderna and Merck's oppositions in September 2018 and a hearing was conducted before the Opposition Division of the EPO in October 2019. At the conclusion of the hearing, the EPO upheld an auxiliary request adopting the amendment, as put forth by us, of certain claims of the '254 Patent. In February 2020, Moderna and Merck filed Notices of Appeal challenging the EPO's grant of the auxiliary request. We filed our responses to the appeals in September 2020. In March 2022, Moderna filed further written submissions to which we and Genevant responded in August 2022. In April 2023, we and Genevant withdrew our auxiliary request, however, the original (main) request remains in the action. We and Moderna informed the Board of Appeals that we would not object to a remittance of the matter without a hearing to the Opposition Division of the EPO. The hearing in this matter before the Board of Appeals was subsequently cancelled and resubmitted to the Opposition Division (i.e., lower board) of the EPO. In October 2023, the Opposition Division issued a summons for oral proceedings and provided its preliminary and non-binding opinion on the subject matter to be discussed at the hearing. In November 2023, we responded to the summons and in January 2024, Moderna and Merck filed their reply to the written opinion of the Opposition Division, as well as to our written submission from November 2023. We responded to Moderna and Merck's reply in April 2024. Oral proceedings were held in June 2024, and the Opposition Division upheld the '254 Patent but declined our and Genevant's request to broaden certain claims in the '254 Patent. Both parties appealed the Opposition Division's decision and in March 2025, the Board of Appeals scheduled oral proceedings for January 2026.

On April 29, 2025, Moderna filed a revocation action on EPO patent EP 4 241 767 (the '767 patent) with the EPO, requesting that the patent be revoked in its entirety for all contracting states. Moderna submitted its opposition brief in July 2025 and we are currently preparing our response.

While we are the patent owner, the '254 Patent, the '767 Patent, and the other patents in our LNP portfolio have been licensed to Genevant under the Genevant License.

CRITICAL ACCOUNTING POLICIES AND SIGNIFICANT JUDGEMENTS AND ESTIMATES

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

We believe there have been no significant changes in our critical accounting policies and estimates as discussed in "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations" of our Annual Report on Form 10-K for the year ended December 31, 2024.

RECENT ACCOUNTING PRONOUNCEMENTS

From time to time, new accounting pronouncements are issued by the Financial Accounting Standards Board or other standard setting bodies that are adopted by us as of the specified effective date. Unless otherwise discussed, we believe that the impact of recently issued standards that are not yet effective will not have a material impact on our financial position or results of operations upon adoption.

Please refer to Note 2 to our condensed consolidated financial statements included in "Part I, Item 1-Financial Statements (Unaudited)" of this Form 10-Q for a description of recent accounting pronouncements applicable to our business.

RESULTS OF OPERATIONS

The following summarizes the results of our operations for the periods shown:

| | Three Months Ended June 30, | | Six Months Ended June 30, | |
|-----------------------------|-----------------------------|-------------|---------------------------|-------------|
| | 2025 | 2024 | 2025 | 2024 |
| | (in thousands) | | | |
| Total revenue | \$ 10,739 | \$ 1,726 | \$ 12,503 | \$ 3,258 |
| Operating expenses | 9,251 | 23,309 | 36,714 | 44,204 |
| Gain (loss) from operations | 1,488 | (21,583) | (24,211) | (40,946) |
| Other income | 1,035 | 1,787 | 2,208 | 3,275 |
| Net income (loss) | \$ 2,523 | \$ (19,796) | \$ (22,003) | \$ (37,671) |

Revenue

Revenues are summarized in the following tables:

| | Three Months Ended June 30, | | | |
|--|-----------------------------|------------|----------|------------|
| | 2025 | % of Total | 2024 | % of Total |
| (in thousands, except percentages) | | | | |
| Revenue from collaborations and licenses | | | | |
| Royalties from sales of ONPATTRO | \$ 591 | 6 % | \$ 642 | 37 % |
| Qilu Pharmaceutical Co., Ltd. | 9,622 | 90 % | 513 | 30 % |
| Non-cash royalty revenue | | | | |
| Royalties from sales of ONPATTRO | 526 | 5 % | 571 | 33 % |
| Total revenue | \$ 10,739 | 100 % | \$ 1,726 | 100 % |

| | Six Months Ended June 30, | | | |
|--|---------------------------|------------|----------|------------|
| | 2025 | % of Total | 2024 | % of Total |
| (in thousands, except percentages) | | | | |
| Revenue from collaborations and licenses | | | | |
| Royalties from sales of ONPATTRO | \$ 1,095 | 9 % | \$ 1,337 | 41 % |
| Qilu Pharmaceutical Co., Ltd. | 10,434 | 83 % | 757 | 23 % |
| Non-cash royalty revenue | | | | |
| Royalties from sales of ONPATTRO | 974 | 8 % | 1,164 | 36 % |
| Total revenue | \$ 12,503 | 100 % | \$ 3,258 | 100 % |

Total revenue increased \$9.0 million and \$9.2 million for the three and six months ended June 30, 2025, respectively, compared to the same periods in 2024, due primarily to recognizing all \$9.6 million of previously deferred revenue upon the conclusion of our strategic partnership with Qilu in June 2025, partially offset by a decrease in license royalty revenue from Alnylam and Acuitas due to lower sales of ONPATTRO in the 2025 periods compared to the 2024 periods.

Operating expenses

Operating expenses are summarized in the following tables:

| | Three Months Ended June 30, | | | |
|--|------------------------------------|------------|-----------|------------|
| | 2025 | % of Total | 2024 | % of Total |
| | (in thousands, except percentages) | | | |
| Research and development | \$ 5,498 | 59 % | \$ 15,551 | 67 % |
| General and administrative | 3,328 | 36 % | 7,547 | 32 % |
| Change in fair value of contingent consideration | 260 | 3 % | 211 | 1 % |
| Restructuring costs | 165 | 2 % | — | — % |
| Total operating expenses | \$ 9,251 | 100 % | \$ 23,309 | 100 % |

| | Six Months Ended June 30, | | | |
|--|------------------------------------|------------|-----------|------------|
| | 2025 | % of Total | 2024 | % of Total |
| | (in thousands, except percentages) | | | |
| Research and development | \$ 14,457 | 39 % | \$ 30,954 | 70 % |
| General and administrative | 9,160 | 25 % | 12,859 | 29 % |
| Change in fair value of contingent consideration | 559 | 2 % | 391 | 1 % |
| Restructuring costs | 12,538 | 34 % | — | — % |
| Total operating expenses | \$ 36,714 | 100 % | \$ 44,204 | 100 % |

Research and development

Research and development expenses consist primarily of personnel expenses, fees paid to clinical research organizations and contract manufacturers, consumables and materials, consulting, and other third-party expenses to support our clinical and preclinical activities, as well as a portion of stock-based compensation and general overhead costs.

Research and development expenses decreased \$10.1 million and \$16.5 million for the three and six months ended June 30, 2025, respectively, compared to the same periods in 2024. The decrease was due primarily to our decision in the third quarter of 2024 to cease all discovery efforts, discontinue our IM-PROVE III clinical trial and implement a 40% reduction in our workforce to streamline the organization to focus our efforts on advancing the clinical development of imdusiran and AB-101.

A significant portion of our research and development expenses are not tracked by project as they benefit multiple projects or our technology platform and because our most-advanced programs are not yet in late-stage clinical development.

General and administrative

General and administrative expenses decreased \$4.2 million and \$3.7 million for the three and six months ended June 30, 2025, respectively, as compared to the same periods in 2024, due primarily to a decrease in employee compensation-related expenses and a decrease in litigation-related legal fees.

Change in fair value of contingent consideration

Contingent consideration is a liability related to our acquisition of Enantigen Therapeutics, Inc. in October 2014. In general, as time passes and assuming no changes to the assumptions related to the contingency, the fair value of the contingent consideration increases as the progress of our programs get closer to triggering contingent payments based on certain sales milestones of our first commercial product for cHBV. As imdusiran continues to progress through clinical trials, we will adjust our assumptions regarding probability of success commensurate with the progression of the program, which will increase the fair value of the liability.

Restructuring

In March 2025, our Board took action to reduce our workforce by 57%. The Board also decided to exit our corporate headquarters in Warminster, Pennsylvania and to discontinue in-house scientific research. In connection with these actions, we incurred a one-time restructuring charge in the first quarter of 2025 of \$12.4 million, which includes approximately \$6.0 million of cash severance and continued benefits paid, \$2.3 million of non-cash expense related to the modification of equity awards, non-cash impairment charges for leasehold improvements and laboratory equipment of \$1.9 million and \$0.9 million, respectively, \$0.9 million related to impairment of the right-of-use asset associated with the lease of our corporate headquarters and a \$0.4 million accrual of lease-related operating expenses.

During the three months ended June 30, 2025, we recorded an additional \$0.2 million of restructuring costs related to severance and benefits. As of June 30, 2025, there was \$0.4 million of accrued restructuring costs for severance payments and a \$0.3 million accrual of lease-related operating expenses included in accounts payable and accrued liabilities.

Other income (loss)

The components of our other income (loss) are summarized in the following table:

| | Three Months Ended June 30, | | Six Months Ended June 30, | |
|------------------------------|------------------------------------|-------------|----------------------------------|-------------|
| | 2025 | 2024 | 2025 | 2024 |
| | (in thousands) | | | |
| Interest income | \$ 1,042 | \$ 1,829 | \$ 2,239 | \$ 3,374 |
| Interest expense | (28) | (34) | (56) | (78) |
| Foreign exchange gain (loss) | 21 | (8) | 25 | (21) |
| Total other income | \$ 1,035 | \$ 1,787 | \$ 2,208 | \$ 3,275 |

Interest income

The decrease in interest income for the three and six months ended June 30, 2025 compared to the same periods in 2024 was due primarily to less interest earned on our cash and investment balances due to a lower average balance and a general decrease in market interest rates.

Interest expense

Interest expense for the three and six months ended June 30, 2025 and 2024 consisted primarily of non-cash amortization of discount and issuance costs related to the sale of a portion of our ONPATTRO royalty interest to OMERS in July 2019. The decrease is related to the declining balance of the unamortized discount and issuance costs.

LIQUIDITY AND CAPITAL RESOURCES

The following table summarizes our cash flow activities for the periods indicated:

| | Six Months Ended June 30, | |
|--|---------------------------|------------------|
| | 2025 | 2024 |
| | (in thousands) | |
| Net loss | \$ (22,003) | \$ (37,671) |
| Non-cash items | 5,834 | 3,973 |
| Change in deferred license revenue | (10,434) | (757) |
| Net change in other operating items | (2,537) | 656 |
| Net cash used in operating activities | (29,140) | (33,799) |
| Net cash provided by investing activities | 26,960 | 21,523 |
| Issuance of common shares pursuant to the Open Market Sale Agreement | — | 44,124 |
| Cash provided by other financing activities | 3,237 | 4,676 |
| Net cash provided by financing activities | 3,237 | 48,800 |
| Effect of foreign exchange rate changes on cash and cash equivalents | 25 | (21) |
| Increase in cash and cash equivalents | 1,082 | 36,503 |
| Cash and cash equivalents, beginning of period | 36,330 | 26,285 |
| Cash and cash equivalents, end of period | \$ 37,412 | \$ 62,788 |

Since our incorporation, we have financed our operations through sales of equity, debt, revenues from research and development collaborations and licenses with corporate partners, royalty monetization, interest income on funds available for investment, and government contracts, grants and tax credits.

For the six months ended June 30, 2025, \$29.1 million of cash was used in operating activities compared to \$33.8 million used in operating activities for the six months ended June 30, 2024, a decrease of \$4.7 million. The decrease was due primarily to our decisions to cease all discovery efforts, discontinue our IM-PROVE III clinical trial, and decrease our workforce to further streamline the organization to focus our efforts on advancing the clinical development of indusiran and AB-101.

For the six months ended June 30, 2025, net cash provided by investing activities was \$27.0 million, resulting primarily from maturities of investments in marketable securities of \$90.2 million, partially offset by additional investments in marketable securities of \$63.2 million. For the six months ended June 30, 2024, net cash provided by investing activities was \$21.5 million, which resulted primarily from maturities of investments in marketable securities of \$79.6 million, partially offset by additional investments in marketable securities of \$58.0 million.

For the six months ended June 30, 2025, net cash provided by financing activities was \$3.2 million, which was primarily related to \$3.1 million in proceeds from the issuance of common shares pursuant to the exercise of stock options. For the six months ended June 30, 2024, net cash provided by financing activities was \$48.8 million, which included \$44.1 million in proceeds from sales of common shares pursuant to the Sale Agreement (as defined below) and \$4.5 million in proceeds from the issuance of common shares pursuant to the exercise of stock options.

Sources of Liquidity

As of June 30, 2025, we had cash, cash equivalents and investments in marketable securities of \$98.1 million. We had no outstanding debt as of June 30, 2025.

Open Market Sale Agreement

Effective March 26, 2025, we terminated our Open Market Sale Agreement with Jefferies dated December 20, 2018, as amended (the Sale Agreement), under which we could offer and sell common shares, from time to time.

Prior to the termination of the Sale Agreement, we did not issue any common shares pursuant to the Sale Agreement during the six months ended June 30, 2025. For the six months ended June 30, 2024, we issued 16,499,999 common shares pursuant to the Sale Agreement, resulting in net proceeds of approximately \$44.1 million.

Royalty Entitlements

We have a royalty entitlement on ONPATTRO, a drug developed by Alnylam that incorporates our LNP technology and was approved by the FDA and the EMA during the third quarter of 2018 and was launched by Alnylam immediately upon approval in the United States. In July 2019, we sold a portion of this royalty interest to OMERS, effective as of January 1, 2019, for \$20 million in gross proceeds before advisory fees. OMERS will retain this entitlement until it has received \$30 million in royalties, at which point 100% of such royalty interest on future global net sales of ONPATTRO will revert to us. OMERS has assumed the risk of collecting up to \$30 million of future royalty payments from Alnylam and we are not obligated to reimburse OMERS if it fails to collect any such future royalties. From the inception of the royalty sale through June 30, 2025, we have recorded an aggregate of \$25.9 million of non-cash royalty revenue for royalties earned by OMERS. If this royalty entitlement reverts to us, it has the potential to provide an active royalty stream or to be otherwise monetized again in full or in part. In addition to the royalty from the Alnylam LNP license agreement, we are also receiving a second, lower royalty interest on global net sales of ONPATTRO originating from a settlement agreement and subsequent license agreement with Acuitas. The royalty from Acuitas has been retained by us and was not part of the royalty sale to OMERS.

In December 2021, we entered into a technology transfer and exclusive licensing agreement with Qilu pursuant to which we granted Qilu an exclusive (with certain exceptions), sublicensable, royalty-bearing license, under certain intellectual property owned by us, to develop, manufacture and commercialize imdusiran for the treatment or prevention of cHBV infection in Greater China and Taiwan. In partial consideration for the rights granted by us, Qilu paid us a one-time upfront cash payment of \$40 million and made an equity investment of \$15.0 million, both received in January 2022, and agreed to pay us up to \$245 million, net of withholding taxes, upon the achievement of certain technology transfer, development, regulatory and commercialization milestones. Qilu also agreed to pay us double digit royalties into the low twenties percent based upon annual net sales of imdusiran in Greater China and Taiwan. In June 2025, we and Qilu mutually agreed to conclude our strategic partnership, and we now once again hold global rights for imdusiran.

Cash requirements

With the organizational changes announced during the first quarter of 2025, and our ongoing cost management efforts, we expect to significantly reduce our net cash burn in 2025 when compared to 2024. In the future, substantial additional funds would be required to continue with the active development of our pipeline products and technologies. In particular, our funding needs may vary depending on a number of factors including:

- costs associated with prosecuting and enforcing our patent claims and other intellectual property rights, including our ongoing patent infringement matters against Moderna and Pfizer/BioNTech;
- revenue earned from our legacy collaborative partnerships and licensing agreements, including potential royalty payments from Alnylam's ONPATTRO;
- revenue earned from ongoing collaborative partnerships, including milestone and royalty payments;
- the potential requirement to make milestone payments related to our legacy agreements;
- the extent to which we continue the development of our product candidates, add new product candidates to our pipeline, or form collaborative relationships or licensing arrangements to advance our product candidates;
- delays in the development of our product candidates due to preclinical and clinical findings;
- our decisions to in-license or acquire additional products, product candidates or technology for development;
- our ability to attract and retain development or commercialization partners, and their effectiveness in carrying out the development and ultimate commercialization of one or more of our product candidates;
- whether batches of product candidates that we manufacture fail to meet specifications resulting in clinical trial delays and investigational and remanufacturing costs;
- the decisions, and the timing of decisions, made by health regulatory agencies regarding our technology and product

candidates; and

- competing products, product candidates and technological and market developments.

We may seek funding to maintain and advance our business from a variety of sources including public or private equity or debt financing, potential monetization transactions, collaborative or licensing arrangements with pharmaceutical companies and government grants and contracts. If we seek additional funding, there can be no assurance that funding will be available at all or on acceptable terms to maintain and advance our business.

If we decide to seek funding and such adequate funding is not available, we may be required to delay, reduce or eliminate one or more of our development programs or reduce expenses associated with our non-core activities. We may need to obtain funds through arrangements with collaborators or others that may require us to relinquish most or all of our rights to product candidates at an earlier stage of development or on less favorable terms than we would otherwise seek if we were better funded. Insufficient financing may also mean failing to prosecute our patents or relinquishing rights to some of our technologies that we would otherwise develop or commercialize.

OFF-BALANCE SHEET ARRANGEMENTS

We do not have any off-balance sheet arrangements that have or are reasonably likely to have a current or future effect on our financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources that is material to investors.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

The information under this item is not required to be provided by smaller reporting companies.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our principal executive officer and principal financial officer, evaluated the effectiveness of our disclosure controls and procedures as of June 30, 2025. The term “disclosure controls and procedures”, as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the Exchange Act), means controls and other procedures of a company that are designed to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC’s rules and forms, and that such information is accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate, to allow timely decisions regarding required disclosure, particularly during the period in which this Quarterly Report on Form 10-Q was being prepared. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their desired objectives, and our management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation of our disclosure controls and procedures as of June 30, 2025, our principal executive officer and principal financial officer concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

Changes in Internal Control over Financial Reporting

There have been no changes in our internal control over financial reporting (as defined in Rules 13a–15(f) and 15d–15(f) under the Exchange Act) during the three months ended June 30, 2025 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

Patent Infringement Litigation vs. Moderna

United States:

On February 28, 2022, we and Genevant filed a lawsuit in the U.S. District Court for the District of Delaware against Moderna, Inc. and a Moderna affiliate (collectively, Moderna) seeking damages for infringement of U.S. Patent Nos. 8,058,069, 8,492,359, 8,822,668, 9,364,435, 9,504,651, and 11,141,378 in the manufacture and sale of MRNA-1273, Moderna's vaccine for COVID-19. The patents relate to nucleic acid-lipid particles and lipid vesicles, as well as compositions and methods for their use. In the lawsuit, we seek fair compensation for Moderna's use of our patented technology that was developed with great effort and at great expense, without which Moderna's COVID-19 vaccine would not have been successful. In May 2022, Moderna filed a partial motion to dismiss the claims "relating to Moderna's sale and provision of COVID-19 vaccine doses to the U.S. Government" and argued that U.S. taxpayers, not Moderna, are financially liable for any infringement by Moderna of our patents. In November 2022, the court issued an Order denying Moderna's motion. In February 2023, the U.S. Department of Justice filed a Statement of Interest in the action. Subsequently in February 2023, the court held a hearing and directed the parties and the U.S. Government to submit letters regarding the impact of the Government's Statement of Interest on Moderna's motion to dismiss. In March 2023, the court reaffirmed its denial of Moderna's motion to dismiss. The claim construction hearing was held in February 2024, and in April 2024, the court issued its opinion regarding the claims construction. The court agreed with both of our positions regarding the Composition of Total Lipid ('069) Patent that: (i) the claimed molar percentage (mol. %) ranges can be met by any particle and is not limited to "finished" particles that are not subjected to further process steps; and (ii) that the claimed mol. % ranges include standard variation based on the number of significant figures recited in the claim. The court also agreed with our position regarding the Cationic Lipid with Protonatable Tertiary Amine ('378) Patent that there is no limitation as to the mol. % of the claimed cationic lipid. Regarding the Encapsulation of mRNA ('651) Patent, the court held that "wherein at least 70% / at least 80% / about 90% of the mRNA in the formulation is fully encapsulated in the lipid vesicles" means "wherein at least 70% / at least 80% / about 90% of the mRNA is fully, as distinct from partially, contained inside the lipid vesicles". Fact discovery has been completed, and expert discovery is concluding. The summary judgment phase of the case began in July 2025 and a jury trial is scheduled to be held in March 2026. Additionally, in July 2025, the case was reassigned to a different judge in the same court.

International:

On March 3, 2025, we and Genevant filed five international lawsuits against Moderna seeking to enforce patents protecting our patented lipid nanoparticle technology. These five lawsuits target alleged infringing activities by Moderna in 30 countries, including Austria, Belgium, Bulgaria, Canada, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Latvia, Lithuania, Luxembourg, Malta, Monaco, Netherlands, Norway, Poland, Portugal, Romania, Slovenia, Spain, Sweden, Switzerland/Liechtenstein, and Turkey. We and Genevant are seeking monetary relief and injunctions against the continued manufacture and sale of Moderna's COVID-19 vaccine and, in the Unified Patent Court, additional Moderna products, which Moderna has represented use the same lipid nanoparticle technology as the COVID-19 vaccine, including its RSV vaccine. Where permitted to do so at this stage, we and Genevant submitted evidence from testing of commercial Moderna product samples sourced from the U.S. and European Union indicating the samples contain lipid nanoparticles falling under the protective scope of the claims of our lipid composition patents. The five international lawsuits are as follows:

- Canada: Federal Court of Canada File No. T-704-25, seeking a permanent injunction and damages or, if Genevant so elects, an accounting of Moderna's profits, attributable to infringement of Canadian Patent No. 2,721,333.
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- Switzerland: a case seeking a permanent injunction and monetary relief, which upon later choice of Genevant and Arbutus can include surrender of profits, damages or a reasonable royalty, for infringement of EP 2 279 254.
- Unified Patent Court: Case 10280/2025, seeking permanent and provisional injunctions, as well as monetary damages, which can include recovery of Moderna's unfair profits, from infringement of EP 2 279 254.
- Unified Patent Court: Case 10280/2025, seeking permanent and provisional injunctions, as well as monetary damages, which can include recovery of Moderna's unfair profits, from infringement of EP 4 241 767.

The five complaints have been or are being served on Moderna pursuant to the service of process rules of the respective courts. Moderna and/or its affiliates have responded to the lawsuits in Japan, Switzerland and the Unified Patent Court, and the first major hearings are expected to occur in the first half of calendar year 2026.

Patent Infringement Litigation vs. Pfizer and BioNTech

On April 4, 2023, we and Genevant filed a lawsuit in the U.S. District Court for the District of New Jersey against Pfizer Inc. (Pfizer) and BioNTech SE (BioNTech) seeking damages for infringement of U.S. Patent Nos. 9,504,651; 8,492,359; 11,141,378; 11,298,320; and 11,318,098 in the manufacture and sale of any COVID-19 mRNA-LNP vaccines. The patents relate to nucleic acid-lipid particles and their composition, manufacture, delivery and methods of use. In the lawsuit, we seek fair compensation for Pfizer's and BioNTech's use of our patented technology that was developed with great effort and at great expense, without which their COVID-19 mRNA-LNP vaccines would not have been successful. The claim construction hearing occurred in December 2024, and fact discovery is ongoing. The court has not provided guidance for the timing of its ruling in the claim construction hearing, which could potentially come in 2025.

Moderna and Merck European Oppositions

On April 5, 2018, Moderna and Merck, Sharp & Dohme Corporation (Merck) filed Notices of Opposition to Arbutus' European patent EP 2279254 (the '254 Patent) with the European Patent Office (EPO), requesting that the '254 Patent be revoked in its entirety for all contracting states. We filed a response to Moderna and Merck's oppositions in September 2018 and a hearing was conducted before the Opposition Division of the EPO in October 2019. At the conclusion of the hearing, the EPO upheld an auxiliary request adopting the amendment, as put forth by us, of certain claims of the '254 Patent. In February 2020, Moderna and Merck filed Notices of Appeal challenging the EPO's grant of the auxiliary request. We filed our responses to the appeals in September 2020. In March 2022, Moderna filed further written submissions to which we and Genevant responded in August 2022. In April 2023, we and Genevant withdrew our auxiliary request, however, the original (main) request remains in the action. We and Moderna informed the Board of Appeals that we would not object to a remittance of the matter without a hearing to the Opposition Division of the EPO. The hearing in this matter before the Board of Appeals was subsequently cancelled and resubmitted to the Opposition Division (i.e., lower board) of the EPO. In October 2023, the Opposition Division issued a summons for oral proceedings and provided its preliminary and non-binding opinion on the subject matter to be discussed at the hearing. In November 2023, we responded to the summons and in January 2024, Moderna and Merck filed their reply to the written opinion of the Opposition Division, as well as to our written submission from November 2023. We responded to Moderna and Merck's reply in April 2024. Oral proceedings were held in June 2024, and the Opposition Division upheld the '254 Patent but declined our and Genevant's request to broaden certain claims in the '254 Patent. Both parties appealed the Opposition Division's decision and in March 2025, the Board of Appeals scheduled oral proceedings for January 2026.

On April 29, 2025, Moderna filed a revocation action on EPO patent EP 4 241 767 (the '767 patent) with the EPO, requesting that the patent be revoked in its entirety for all contracting states. Moderna submitted its opposition brief in July 2025 and we are currently preparing our response.

While we are the patent owner, the '254 Patent, the '767 Patent, and the other patents in our LNP portfolio have been licensed to Genevant under the Genevant License.

Other Matters

We are also involved with various legal matters arising in the ordinary course of business. We make provisions for liabilities when it is both probable that a liability has been incurred and the amount of the loss can be reasonably estimated. Such provisions are reviewed at least quarterly and adjusted to reflect the impact of any settlement negotiations, judicial and administrative rulings, advice of legal counsel, and other information and events pertaining to a particular case. Litigation is inherently unpredictable. Although the ultimate resolution of these various matters cannot be determined at this time, we do not believe that such matters, individually or in the aggregate, will have a material adverse effect on our consolidated results of operations, cash flows, or financial condition.

ITEM 1A. RISK FACTORS

There have been no material changes in our risk factors from those disclosed in our Annual Report on Form 10-K for the fiscal year ended December 31, 2024.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

None.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

Trading Plans

During the three months ended June 30, 2025, none of our directors or officers adopted, modified or terminated a “Rule 10b5-1 trading arrangement” or a “non-Rule 10b5-1 trading arrangement” as such terms are defined under Item 408 of Regulation S-K.

ITEM 6. EXHIBITS**EXHIBIT INDEX**

| Number | Description |
|---------------|---|
| 3.1 | <u>Notice of Articles and Articles of the Company, as amended (incorporated herein by reference to Exhibit 3.1 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2017, filed with the SEC on March 16, 2018).</u> |
| 3.2 | <u>Amendment to Articles of the Company (incorporated herein by reference to Exhibit 3.1 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2018, filed with the SEC on November 7, 2018).</u> |
| 10.1†+ | <u>Termination Agreement, dated June 20, 2025, by and between Arbutus Biopharma Corporation and Qilu Pharmaceutical Co., Ltd. (incorporated herein by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K, filed with the SEC on June 25, 2025).</u> |
| 10.2#+ | <u>Separation Agreement and General Release, dated effective April 1, 2025, by and between Arbutus Biopharma, Inc. and Karen Sims (incorporated herein by reference to Exhibit 10.6 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2025, filed with the SEC on May 14, 2025).</u> |
| 10.3#+ | <u>Separation Agreement and General Release, dated effective April 2, 2025, by and between Arbutus Biopharma, Inc. and David Hastings (incorporated herein by reference to Exhibit 10.7 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2025, filed with the SEC on May 14, 2025).</u> |
| 31.1* | <u>Certification of Principal Executive Officer pursuant to Rule 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</u> |
| 31.2* | <u>Certification of Principal Financial Officer pursuant to Rule 13a-14(a) or 15d-14(a) of 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 Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.</u> |
| 32.2** | <u>Certification of Principal 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 | The following materials from Arbutus Biopharma Corporation's Quarterly Report on Form 10-Q for the quarter ended June 30, 2025, formatted in inline XBRL (eXtensible Business Reporting Language): (i) Condensed Consolidated Balance Sheets; (ii) Condensed Consolidated Statements of Operations; (iii) Condensed Consolidated Statements of Comprehensive Income (Loss); (iv) Condensed Consolidated Statements of Stockholders' Equity; (v) Condensed Consolidated Statements of Cash Flows; and (vi) Notes to Condensed Consolidated Financial Statements. |
| 104 | Cover page interactive data file (embedded within the inline XBRL document and included in Exhibit 101). |

* Filed herewith.

** Furnished herewith.

† Certain confidential portions of the agreement were omitted by means of marking such portions with brackets (due to the registrant customarily and actually treating such information as private or confidential and such omitted information not being material) pursuant to Item 601 of Regulation S-K promulgated by the SEC. Arbutus agrees to supplementally furnish a copy of any confidential portions to the SEC upon request.

Management Contract or Compensatory Arrangement

+ Certain schedules (or similar attachments) to this agreement have been omitted in accordance with Item 601(a)(5) of Regulation S-K. A copy of any omitted schedules will be furnished supplementally to the SEC upon request.

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 on August 6, 2025.

ARBUTUS BIOPHARMA CORPORATION

By: /s/ Lindsay Androski
Lindsay Androski
President and Chief Executive Officer
(Principal Executive Officer)

By: /s/ Tuan Nguyen
Tuan Nguyen
Chief Financial Officer
(Principal Financial Officer and Principal Accounting Officer)

**CERTIFICATION PURSUANT TO RULE 13a-14(a) OR 15d-14(a) OF THE SECURITIES
EXCHANGE ACT OF 1934, AS ADOPTED PURSUANT TO SECTION 302 OF THE
SARBANES-OXLEY ACT OF 2002**

I, Lindsay Androski, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Arbutus Biopharma Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 6, 2025

/s/ Lindsay Androski

Name: Lindsay Androski

Title: President and Chief Executive Officer

**CERTIFICATION PURSUANT TO RULE 13a-14(a) OR 15d-14(a) OF THE SECURITIES
EXCHANGE ACT OF 1934, AS ADOPTED PURSUANT TO SECTION 302 OF THE
SARBANES-OXLEY ACT OF 2002**

I, Tuan Nguyen, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Arbutus Biopharma Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 6, 2025

/s/ Tuan Nguyen

Name: Tuan Nguyen

Title: Chief 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 on Form 10-Q of Arbutus Biopharma Corporation (the "Company") for the quarter ended June 30, 2025, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Lindsay Androski, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

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

Date: August 6, 2025

/s/ Lindsay Androski

Name: Lindsay Androski

Title: President and Chief Executive 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 on Form 10-Q of Arbutus Biopharma Corporation (the "Company") for the quarter ended June 30, 2025, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Tuan Nguyen, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

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

Date: August 6, 2025

/s/ Tuan Nguyen

Name: Tuan Nguyen

Title: Chief Financial Officer