UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 10-Q

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

For the quarterly period ended June 30, 2024

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: 0-51891

INTERNATIONAL STEM CELL CORPORATION

(Exact name of registrant as specified in its charter)

Delaware	**20-4494098**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
9745 Businesspark Ave San Diego, CA	**92131**
(Address of principal executive offices)	**(Zip Code)**

(760) 940-6383
(Registrant's telephone number, including area code)

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

Title of each class	**Trading Symbol(s)**	**Name of each exchange on which registered**
None	None	None

Indicated 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 X 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 X 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	X	Smaller reporting company	X
		Emerging growth company	☐

If an emerging growth company, indicate by check mark if the registrant 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 X

As of August 8, 2024, the Registrant had 8,004,389 shares of Common Stock outstanding.

International Stem Cell Corporation and Subsidiaries
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PART I – FINANCIAL INFORMATION

Item 1. Condensed Consolidated Financial Statements

International Stem Cell Corporation and Subsidiaries
Condensed Consolidated Balance Sheets
(In thousands, except share and par value data)
(Unaudited)

	June 30, 2024	December 31, 2023
Assets		
Current assets:		
Cash	$ 1,290	$ 1,588
Accounts receivable, net	810	574
Inventories	1,415	1,263
Prepaid expenses and other current assets	304	96
Total current assets	3,819	3,521
Non-current inventories	240	266
Property and equipment, net	286	215
Intangible assets, net	758	800
Right-of-use assets	460	557
Deposits and other assets	31	31
Total assets	$ 5,594	$ 5,390
Liabilities, Redeemable Convertible Preferred Stock and Stockholders' Deficit		
Current liabilities:		
Accounts payable	$ 377	$ 364
Accrued liabilities	572	485
Operating lease liabilities, current	302	276
Advances	250	250
Related party note payable	3,523	3,457
Total current liabilities	5,024	4,832
Operating lease liabilities, net of current portion	286	445
Total liabilities	5,310	5,277
Commitments and contingencies (Note 8)		
Series D redeemable convertible preferred stock, $0.001 par value; 50 shares authorized; 43 shares issued and outstanding; liquidation preference of $4,300 at June 30, 2024 and December 31, 2023	4,300	4,300
Stockholders' Deficit:		
Non-redeemable convertible preferred stock, $0.001 par value; 10,004,310 and 10,004,310 shares authorized; 5,254,310 and 5,254,310 shares issued and outstanding; liquidation preference of $9,804 and $9,796 at June 30, 2024 and December 31, 2023, respectively	5	5
Common stock, $0.001 par value; 120,000,000 shares authorized; 8,004,389 shares issued and outstanding at June 30, 2024 and December 31, 2023	8	8
Additional paid-in capital	106,542	106,276
Accumulated deficit	(110,571)	(110,476)
Total stockholders' deficit	(4,016)	(4,187)
Total liabilities, redeemable convertible preferred stock and stockholders' deficit	$ 5,594	$ 5,390

See accompanying notes to the unaudited condensed consolidated financial statements.

International Stem Cell Corporation and Subsidiaries
Condensed Consolidated Statements of Operations
(In thousands, except share and per share data)
(Unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2024	2023	2024	2023
Product sales	$ 2,331	$ 1,841	$ 4,460	$ 3,927
Operating expenses:				
Cost of sales	913	713	1,800	1,537
General and administrative	884	918	1,793	1,718
Selling and marketing	302	309	636	624
Research and development	83	45	260	190
Total operating expenses	2,182	1,985	4,489	4,069
Income (loss) from operations	149	(144)	(29)	(142)
Other income (expense):				
Interest expense	(35)	(35)	(71)	(71)
Other income	5	8	5	8
Employee retention credit	—	663	—	663
Total other income (expense), net	(30)	636	(66)	600
Net income (loss)	119	492	(95)	458
Undistributed earnings allocated to participating securities	(57)	(233)	—	(217)
Net income (loss) allocable to common stockholders	$ 62	$ 259	$ (95)	$ 241
Net income (loss) per common share, basic and diluted	$ 0.01	$ 0.03	$ (0.01)	$ 0.03
Weighted-average common shares used to compute net income (loss) per share, basic and diluted	8,004,389	8,004,389	8,004,389	8,004,389

See accompanying notes to the unaudited condensed consolidated financial statements.

International Stem Cell Corporation and Subsidiaries
Condensed Consolidated Statements of Changes in Redeemable Convertible Preferred Stock and Stockholders' Deficit
(In thousands)
(Unaudited)

Three and Six Months Ended June 30, 2024

	Series D Redeemable Convertible Preferred Stock		Non-redeemable Convertible Preferred Stock		Common Stock		Additional Paid-in	Accumulated	Total Stockholders'
	Shares	Amount	Shares	Amount	Shares	Amount	Capital	Deficit	Deficit
Balance at December 31, 2023	—	$ 0	5,254	$ 5	8,004	$ 8	$ 106,276	$ (110,476)	$ (4,187)
Stock-based compensation	—	—	—	—	—	—	137	—	137
Net loss	—	—	—	—	—	—	—	(214)	(214)
Balance at March 31, 2024	—	0	5,254	5	8,004	8	106,413	(110,690)	(4,264)
Stock-based compensation	—	—	—	—	—	—	129	—	129
Net income	—	—	—	—	—	—	—	119	119
Balance at June 30, 2024	—	$ 0	5,254	$ 5	8,004	$ 8	$ 106,542	$ (110,571)	$ (4,016)

Three and Six Months Ended June 30, 2023

	Series D Redeemable Convertible Preferred Stock		Non-redeemable Convertible Preferred Stock		Common Stock		Additional Paid-in	Accumulated	Total Stockholders'
	Shares	Amount	Shares	Amount	Shares	Amount	Capital	Deficit	Deficit
Balance at December 31, 2022	—	$ 0	5,254	$ 5	8,004	$ 8	$ 105,812	$ (110,345)	$ (4,520)
Stock-based compensation	—	—	—	—	—	—	108	—	108
Net loss	—	—	—	—	—	—	—	(34)	(34)
Balance at March 31, 2023	—	0	5,254	5	8,004	8	105,920	(110,379)	(4,446)
Stock-based compensation	—	—	—	—	—	—	108	—	108
Net income	—	—	—	—	—	—	—	492	492
Balance at June 30, 2023	—	$ 0	5,254	$ 5	8,004	$ 8	$ 106,028	$ (109,887)	$ (3,846)

See accompanying notes to the unaudited condensed consolidated financial statements.

International Stem Cell Corporation and Subsidiaries
Condensed Consolidated Statements of Cash Flows
(In thousands)
(Unaudited)

	Six Months Ended June 30,	
	2024	**2023**
Cash flows from operating activities		
Net income (loss)	$ (95)	$ 458
Adjustments to reconcile net income (loss) to net cash used in operating activities:		
Stock-based compensation	266	216
Depreciation and amortization	99	99
Non-cash operating lease expense	97	81
Non-cash interest expense on related party note payable	66	65
Change in inventory reserve	49	30
Impairment of intangible assets	2	—
Changes in operating assets and liabilities:		
Accounts receivable	(236)	85
Inventories	(175)	18
Prepaid expenses and other current assets	(208)	(258)
Accounts payable	13	9
Accrued liabilities	85	13
Operating lease liabilities	(133)	(110)
Net cash (used in) provided by operating activities	(170)	706
Cash flows from investing activities		
Purchases of property and equipment	(128)	(66)
Net cash used in investing activities	(128)	(66)
Net (decrease) increase in cash	(298)	640
Cash, beginning of period	1,588	742
Cash, end of period	$ 1,290	$ 1,382
Supplemental disclosure of non-cash investing activities:		
Payments for patent licenses included in accrued liabilities	$ 1	$ —
Supplemental disclosure of cash flow information:		
Cash paid for interest	$ 5	$ 5

See accompanying notes to the unaudited condensed consolidated financial statements.

International Stem Cell Corporation and Subsidiaries
Notes to Condensed Consolidated Financial Statements
(Unaudited)

1. Description of Business, Basis of Presentation, and Summary of Significant Accounting Policies

Description of Business

International Stem Cell Corporation (the "Company") was organized in Delaware in June 2005 and is headquartered in San Diego, California. The Company is primarily a research and development company for the therapeutic market, which has focused on advancing potential clinical applications of human parthenogenetic stem cells ("hpSCs") for the treatment of various diseases of the central nervous system and liver. The Company has the following wholly owned subsidiaries:

•Lifeline Cell Technology, LLC ("LCT") – for the biomedical market, develops, manufactures and commercializes primary human cell research products, including human cell culture products such as frozen human "primary" cells and the reagents (called "media") needed to grow, maintain and differentiate the cells;

•Lifeline Skin Care, Inc. ("LSC") – for the anti-aging market, develops, manufactures and markets a category of anti-aging skin care products based on the Company's proprietary parthenogenetic stem cell technology and small molecule technology;

•Cyto Therapeutics Pty. Ltd. ("Cyto Therapeutics") – performs research and development ("R&D") for the therapeutic market and is currently conducting clinical trials in Australia for the use of ISC-hpNSC® in the treatment of Parkinson's disease.

Basis of Presentation

The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles ("GAAP") and the rules and regulations of the U.S. Securities and Exchange Commission (the "SEC") applicable to interim financial statements. Certain information and notes normally included in annual financial statements prepared in accordance with GAAP have been condensed or omitted pursuant to those rules and regulations. The unaudited interim condensed consolidated financial statements reflect all adjustments consisting of normal recurring adjustments which, in the opinion of management, are necessary for a fair statement of the Company's condensed consolidated financial statements. The operating results for the three and six months ended June 30, 2024 are not necessarily indicative of the results that may be expected for the full year ending December 31, 2024. The condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements and the notes thereto for the year ended December 31, 2023 included in the Company's annual report on Form 10-K filed with the SEC on March 28, 2024.

Going Concern

The Company had an accumulated deficit of approximately $110.6 million as of June 30, 2024. The Company has historically incurred net losses and negative operating cash flows annually since inception. The Company has generated no revenue from its therapeutic product candidates. Unless the Company obtains additional financing or extends the maturity on its existing financing, the Company does not have sufficient cash on hand to sustain operations for at least twelve months from the issuance date of these condensed consolidated financial statements.

There can be no assurance that the Company will be successful in maintaining normal operating cash flow or obtaining additional funding. These circumstances raise substantial doubt about the Company's ability to continue as a going concern. For the foreseeable future, the Company's ability to continue its operations is dependent upon its ability to obtain additional financing or to extend the maturity on its existing financing. The accompanying condensed consolidated financial statements do not include any adjustments to reflect the possible future effects on the recoverability and classification of assets or the amounts and classifications of liabilities that may result from the outcome of the uncertainty concerning the Company's ability to continue as a going concern.

The Company continues to evaluate various financing sources and options to raise working capital to help fund current research and development programs and operations. The Company plans to obtain significant additional funding from sources, including through debt and equity financing, license arrangements, grants and/or collaborative research arrangements to sustain its operations and develop products.

The timing and degree of any future capital requirements will depend on several factors, including:

•the accuracy of the assumptions underlying the estimates for capital needs;

•the extent that revenues from sales of LSC and LCT products cover the related costs and provide capital;

•scientific progress in research and development programs;

•the magnitude and scope of the Company's research and development programs and its ability to establish, enforce and maintain strategic arrangements for research, development, clinical testing, manufacturing and marketing;

•the progress with preclinical development and clinical trials;

•the time and costs involved in obtaining regulatory approvals;

•the costs involved in preparing, filing, prosecuting, maintaining, defending and enforcing patent claims;

•the number and type of product candidates that the Company decides to pursue; and

•demand from the Company's largest original equipment manufacturer customers.

Additional debt financing may be expensive and require the Company to pledge all or a substantial portion of its assets. If additional funds are obtained through arrangements with collaborative partners, these arrangements may require the Company to relinquish the rights to some of its technologies, product candidates, or products that the Company would otherwise seek to develop and commercialize on its own. Furthermore, if sufficient capital is not available, the Company may be required to delay, reduce the scope of, or eliminate one or more of its product initiatives. The Company's failure to raise capital or enter into related arrangements when needed would have a negative impact on its financial condition.

Principles of Consolidation and Foreign Currency Transactions

The condensed consolidated financial statements include the accounts of International Stem Cell Corporation and its wholly owned subsidiaries. All intercompany balances and transactions have been eliminated in consolidation. The functional currency of the Company and its wholly owned subsidiaries is the U.S. dollar. Monetary assets and liabilities that are not denominated in the functional currency are remeasured each reporting period into U.S. dollars at foreign currency exchange rates in effect at the respective balance sheet date. Non-monetary assets and liabilities and equity are remeasured at the historical exchange rates. Revenue and expenses are remeasured at the average rate in effect on the date of the transaction. Net realized and unrealized gains and losses from foreign currency transactions and remeasurement are reported in general and administrative expense in the accompanying condensed consolidated statements of operations and were not material for the periods presented.

Use of Estimates

The preparation of condensed consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts reported in the condensed consolidated financial statements and accompanying notes. Significant estimates include patent life (remaining legal life versus remaining useful life), inventories carrying values, and the fair value of stock option grants using the Black-Scholes option valuation model. By their nature, estimates are subject to an inherent degree of uncertainty and actual results could differ from these estimates.

Segments

The Company's chief operating decision-maker reviews financial information presented on a consolidated basis, accompanied by disaggregated information for each reportable company's statement of operations. The Company operates the business on the basis of three reporting segments: ISCO – therapeutic market; LCT – biomedical market; and LSC – anti-aging market.

Inventories

Inventories are accounted for using the average cost and first-in, first-out ("FIFO") methods for LCT cell culture media and reagents, average cost and specific identification methods for LSC products, and specific identification method for other LCT products. Inventories are stated at the lower of cost or net realizable value. Laboratory supplies used in the research and development process are expensed as consumed. LCT's inventories have a long product life cycle, do not have a shelf life when frozen, and future demand is uncertain. At each reporting period, the Company estimates its reserve allowance for excess and obsolete inventories using historical sales data and inventory turnover rates. The establishment of a reserve for excess and obsolete inventories establishes a new cost basis in inventories. If the Company is able to sell previously reserved inventories, the related reserves and inventories balance would be reduced in the period of sale. The value of the inventories that are not expected to be sold within twelve months of the current reporting period is classified as non-current inventories on the accompanying condensed consolidated balance sheets.

Accounts Receivable, net

Trade accounts receivable are recorded at the invoice value, net of discounts, and are not interest bearing. Accounts receivable primarily consist of trade accounts receivable from the sales of LCT's products as well as LSC trade receivable amounts related to spa and distributor sales. The Company considers receivables past due based on the contractual payment terms. The Company measures expected credit losses for financial instruments at each reporting date based on historical experience, current conditions and reasonable forecasts. The allowance for credit losses represents the Company's estimate of expected credit losses relating to these factors. Amounts are written off against the allowance for credit losses when the Company determines that a customer account is uncollectible. As of June 30, 2024 and December 31, 2023, the Company's allowance for credit losses was immaterial.

Property and Equipment

Property and equipment are stated at cost. The provision for depreciation and amortization is computed using the straight-line method over the estimated useful lives of the assets, which are generally three to five years. Leasehold improvements are capitalized and amortized over the shorter of the remaining term of the lease or the estimated life of the assets.

Intangible Assets

Intangible assets consist of acquired patent licenses and capitalized legal fees related to the acquisition, filing, maintenance, and defense of patents and trademarks. Amortization begins once the patent is issued by the appropriate authoritative bodies. In the period in which a patent application is rejected or efforts to pursue the patent are abandoned, all the related accumulated capitalized costs are expensed. Patents and other intangible assets are amortized on a straight-line basis over the useful life of the underlying patent, which is generally 15 years. All amortization expense related to intangible assets is included in general and administrative expenses in the accompanying condensed consolidated statements of operations.

Leases

The Company determines if an arrangement is a lease at inception. Operating leases are included in right-of-use assets, operating lease obligations, current, and operating lease obligations, net of current portion, on the Company's consolidated balance sheets.

Right-of-use assets and lease liabilities are recognized at the lease commencement date based on the present value of future minimum lease payments over the lease term. As the Company's leases do not provide an implicit rate, the Company uses a discount rate based on its estimated incremental borrowing rate to determine the right-of-use asset and operating lease liabilities to be recognized. The Company determines its incremental borrowing rate based on the terms and lease payments of its operating leases and what it would normally pay to borrow, on a collateralized basis, over similar terms for an amount equal to the lease payments. Operating lease expense is recognized on a straight-line basis over the lease term. In addition, the Company does not separate lease components from non-lease components.

Long-Lived Asset Impairment

The Company reviews long-lived assets for impairment when events or changes in circumstances ("triggering event") indicate that the carrying value of an asset or group of assets may not be recovered. If a triggering event is determined to have occurred, the carrying value of an asset or group of assets is compared to the future undiscounted cash flows expected to be generated by the asset or group of assets. If the carrying value exceeds the undiscounted cash flows of the asset or group of assets, then an impairment exists, which is measured as the excess of fair value over the asset or asset group's carrying value. Fair value is generally determined using the asset's expected future discounted cash flows or market value, if readily determinable.

Revenue Recognition

The Company's revenue consists primarily of sales of products from its two revenue-generating operating segments, the biomedical market (LCT) and anti-aging market (LSC). The anti-aging market sells products solely through the ecommerce channel. The biomedical market sells primary human cell research products with two product categories, cells and media, which are sold both domestically and internationally. The biomedical market also offers performance of quality control (QC) testing services. No revenue from services was earned during the three and six months ended June 30, 2024 and 2023.

The following table presents the Company's revenue disaggregated by segment, product group, and geography (in thousands, except percentages):

Biomedical market:

	Three Months Ended June 30, 2024				Six Months Ended June 30, 2024			
	Domestic	International	Total Revenues	% of Total Revenues	Domestic	International	Total Revenues	% of Total Revenues
Biomedical products								
Media	$ 1,381	$ 168	$ 1,549	73%	$ 2,685	$ 331	$ 3,016	75%
Cells	414	157	571	27%	739	288	$ 1,027	25%
Total	$ 1,795	$ 325	$ 2,120	100%	$ 3,424	$ 619	$ 4,043	100%

	Three Months Ended June 30, 2023				Six Months Ended June 30, 2023			
	Domestic	International	Total Revenues	% of Total Revenues	Domestic	International	Total Revenues	% of Total Revenues
Biomedical products								
Media	$ 971	$ 132	$ 1,103	68%	$ 1,955	$ 294	$ 2,249	64%
Cells	407	116	523	32%	937	308	1,245	36%
Total	$ 1,378	$ 248	$ 1,626	100%	$ 2,892	$ 602	$ 3,494	100%

Anti-aging market:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2024	2023	2024	2023
Skin care products	$ 211	$ 215	$ 417	$ 433

Contract terms for the unit price, quantity, shipping and payment are governed by sales agreements, invoices or online order forms, which the Company considers to be a customer's contract. The unit price is considered the observable stand-alone selling price for the performance obligation(s) within the arrangements. Any promotional or volume sales discounts are applied evenly to the units sold for purposes of calculating standalone selling price.

The Company recognizes revenue when its customer obtains control of the promised goods or services in an amount that reflects the consideration which the entity expects to receive in exchange for those goods or services. Product sales generally consist of a single performance obligation that the Company satisfies at a point in time (i.e., upon shipment of the product).

For LSC products, ecommerce sales are primarily paid through credit card charges. The anti-aging and biomedical products' standard payment terms for its customers are generally 30 days after the Company satisfies the performance obligation(s).

The Company elects to account for shipping and handling costs, recognized as cost of sales, as activities to fulfill the promise to transfer the goods to a customer. As a result, no consideration is allocated to shipping and handling costs. Rather, the Company accrues the cost of shipping and handling upon shipment of the product, and all contract revenue (i.e., the transaction price) is recognized at the same time.

Variable Consideration

The Company records revenue from customers in an amount that reflects the consideration it expects to be entitled to after transferring control of those goods or services to a customer. From time to time, the Company offers sales promotions on its products such as discounts and free product offers. Variable consideration is estimated at contract inception only to the extent that it is probable that a significant reversal of revenue will not occur and is updated at the end of each reporting period as additional information becomes available.

Practical Expedients

The Company has elected the practical expedient to not determine whether contracts with customers contain significant financing components. The Company pays commissions on certain sales for its biomedical and anti-aging product markets once the customer payment has been received, which are accrued at the time of sale. The Company generally expenses sales commissions when incurred because the amortization period would be one year or less. These costs are recorded within selling and marketing expenses. In addition, the Company has elected to exclude sales taxes consideration from the determined transaction price.

Allowance for Sales Returns

The Company's anti-aging products have a 30-day product return guarantee; however, the Company determined that there is a low probability that returns will occur based on its historical rate of returns. Historically, returns have not been significant and are recognized as a reduction to current period revenue. As of June 30, 2024 and 2023, the Company recorded no allowance for sales returns.

Cost of Sales

Cost of sales consists primarily of salaries and benefits associated with employee efforts expended directly on the production of the Company's products as well as related direct materials, shipping costs, general laboratory supplies and an allocation of overhead.

Research and Development Costs

Research and development costs, which are expensed as incurred, primarily consist of salaries and benefits associated with research and development personnel, overhead and occupancy costs, contract services costs, and amortization of license costs for technology used in research and development with alternative future uses, offset by the research and development tax credit provided by the Australian Taxation Office for qualified expenditures.

Australian Research and Development Tax Credit

The Company's wholly owned subsidiary, Cyto Therapeutics, conducts various research and development activities on the Company's product candidates in Australia. Under Australian tax law, the Australian Taxation Office provides for a refundable tax credit in the form of a cash refund equal to 43.5% of qualified research and development expenditures, not to exceed established thresholds. The Australian research and development tax incentive program is a self-assessment process, and the Australian Government has the right to review the Company's qualifying programs and related expenditures for a period of four years. If such a review were to occur and, as a result of the review and failure of a related appeal, the qualified program and related expenditures were disqualified, the respective research and development refunds could be recalled with penalties and interest.

The refundable tax credit does not depend on the Company's generation of future taxable income or ongoing tax status or position. Accordingly, the credit is not considered an element of income tax accounting under ASC 740 "Income Taxes". The Company uses the grant accounting model by analogy to International Accounting Standards ("IAS") 20 to account for the refundable tax credit from the Australian government. The Company recognizes the research and development tax credit as a reduction to research and development expense when there is reasonable assurance that the tax credit will be received, the relevant expenses have been incurred, and the amount can be reliably measured. The Company recognized a research and development tax credit receivable of $84 thousand and zero as of June 30, 2024 and December 31, 2023, respectively, within prepaid expenses and other current assets on the accompanying condensed consolidated financial statements. During the three and six months ended June 30, 2024 and 2023, the Company recognized a reduction in research and development expenses of $84 thousand and $99 thousand, respectively.

Stock-Based Compensation

The cost of a stock-based award is measured at the grant date based on the estimated fair value of the award. Stock-based compensation is recognized as expense on a straight-line basis, net of forfeitures, which are recognized as incurred, over the requisite service period of the award. The fair value of stock options is estimated using the Black-Scholes option valuation model, which requires the input of subjective assumptions, including price volatility of the underlying stock, risk-free interest rate, dividend yield, and expected life of the option.

Fair Value Measurements

The carrying amounts of the Company's accounts receivable, accounts payable, and accrued liabilities are considered to be representative of their respective fair values because of the short-term nature of those instruments. The carrying value of the Company's related party note payable does not approximate fair value. Refer to Note 7 – Related Party Transactions within the condensed consolidated financial statements for further discussion.

Net Income (Loss) Per Share

Basic net income (loss) per share attributable to common stockholders is calculated by dividing the net income (loss) attributable to common stockholders by the weighted-average number of common shares outstanding during the period. Diluted net income per share attributable to common stockholders is computed by dividing the net income attributable to common stockholders by the weighted-average number of common stock equivalents outstanding for the period determined using the treasury and two-class or "if-converted" method. The two-class method is not applicable during periods with a net loss, as the holders of the convertible preferred stock have no obligation to fund losses. Potentially dilutive common stock equivalents are comprised of stock options and convertible preferred stock.

The following table details the computation of basic and diluted income (loss) per common share as follows ($ in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2024	2023	2024	2023
EPS Numerator				
Net income (loss)	$ 119	$ 492	$ (95)	$ 458
Less: undistributed earnings allocated to participating securities	(57)	(233)	—	(217)
Net income (loss) attributable to common stockholders, basic and diluted	$ 62	$ 259	$ (95)	$ 241
EPS Denominator				
Weighted-average number of common shares outstanding, basic and diluted	8,004,389	8,004,389	8,004,389	8,004,389
Net income (loss) per share attributable to common stockholders, basic and diluted	$ 0.01	$ 0.03	$ (0.01)	$ 0.03

For the three and six months ended June 30, 2024 and 2023, the following common stock options and convertible preferred stock were not included in the diluted net income (loss) per share calculation because the effect would have been anti-dilutive:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2024	2023	2024	2023
Employee stock options	11,970,329	7,315,026	11,888,912	7,088,020
Redeemable convertible preferred stock	2,457,143	2,457,143	2,457,143	2,457,143
Non-redeemable convertible preferred stock	5,061,687	4,764,068	5,061,687	4,764,068
Total	19,489,159	14,536,237	19,407,742	14,309,231

Customer Concentrations

For the three months ended June 30, 2024 and 2023, one customer accounted for approximately 53% and 44% of consolidated product sales, respectively, and approximately 59% and 50%, respectively, of biomedical product sales. As of June 30, 2024 and December 31, 2023, the same customer accounted for approximately 56% and 47% of accounts receivable, net, respectively.

For the three months ended June 30, 2024 and 2023, no other single customer accounted for more than 10% of revenues in any segment. No other single customer accounted for more than 10% of accounts receivable, net as of June 30, 2024. As of December 31, 2023, three customers individually accounted for more than 10% of accounts receivable, net and in the aggregate, accounted for 33% of accounts receivable, net.

Recently Issued Accounting Pronouncements

In November 2023, the FASB issued ASU No. 2023-07, Segment Reporting (Topic 280): *Improvements to Reportable Segment Disclosures* ("ASU 2023-07"). ASU 2023-07 intends to improve reportable segment disclosure requirements, primarily through enhanced disclosures about significant segment expenses. Among other things, the amendments in ASU 2023-07 require additional information regarding significant segment expenses provided to the chief operating decision maker ("CODM"), qualitative and quantitative disclosures regarding other segment items, any additional segment profit or loss measures contemplated by the CODM when assessing segment performance, how the CODM allocates resources among segments, and the title and position of the CODM. Further, the amendments require interim segment reporting disclosures that were previously only required to be disclosed annually. ASU 2023-07 will be effective for the Company for the fiscal year ending December 31, 2024 and for interim periods beginning January 1, 2025. The Company is currently evaluating the potential impact that this standard may have on its consolidated financial statements and related disclosures.

In December 2023, the FASB issued ASU No. 2023-09, *Income Taxes (Topic 740): Improvements to Income Tax Disclosure* ("ASU 2023-09"). ASU 2023-09 intends to provide improved transparency about income tax information through improvements to income tax disclosures. Among other things, the amendments in ASU 2023-09 require enhanced disclosures regarding federal, state, and foreign income taxes primarily related to the income tax rate reconciliation and income taxes paid. Further, the amendments eliminate certain disclosure requirements related to uncertain tax positions and unrecognized deferred tax liabilities. The new standard will be effective for the Company for the fiscal year ending December 31, 2025. The Company is currently evaluating the potential impact that this standard may have on its consolidated financial statements and related disclosures.

Recently Adopted Accounting Pronouncements

In August 2020, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2020-06, *Debt – Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging – Contracts in Entity's Own Equity (Subtopic 815-40): Accounting for Convertible Instruments and Contracts in an Entity's Own Equity* ("ASU 2020-06"). ASU 2020-06 intends to simplify the accounting for convertible debt instruments by reducing the number of accounting models and the number of embedded features that could be recognized separately from the host contract. Among other things, the amendment allows certain convertible debt instruments to be accounted for as a single liability measured at its amortized cost, as long as no other features require bifurcation and recognition as derivatives. Further, the amendments require use of the if-converted method in the diluted earnings per share calculation for convertible instruments. The Company adopted ASC 2020-06 on January 1, 2024. The adoption of this standard did not have a material impact on the Company's condensed consolidated financial statements.

2. Inventories

The components of inventories are as follows (in thousands):

	June 30, 2024	December 31, 2023
Raw materials	$ 580	$ 526
Work in process	752	597
Finished goods	1,096	1,145
	2,428	2,268
Less: allowance for inventory excess and obsolescence	(773)	(739)
Total inventories	$ 1,655	$ 1,529
Inventories	$ 1,415	$ 1,263
Non-current inventories	240	266
Total inventories	$ 1,655	$ 1,529

3. Prepaid Expenses and Other Current Assets

The components of prepaid expenses and other current assets are as follows (in thousands):

	June 30, 2024	December 31, 2023
Prepaid expenses	$ 209	$ 80
Australian research and development tax credit	84	—
Other current assets	11	16
Total prepaid expenses and other current assets	$ 304	$ 96

4. Property and Equipment

Property and equipment consist of the following (in thousands):

	June 30, 2024	December 31, 2023
Machinery and equipment	$ 1,720	$ 1,602
Computer equipment and software	221	221
Office equipment	89	89
Leasehold improvements	625	617
Construction in progress	12	12
	2,667	2,541
Less: accumulated depreciation and amortization	(2,381)	(2,326)
Property and equipment, net	$ 286	$ 215

Depreciation and amortization expense for the three months ended June 30, 2024 and 2023 was $29 thousand and $27 thousand, respectively. Depreciation and amortization expense for the six months ended June 30, 2024 and 2023 was $57 thousand and $58 thousand, respectively. During the three and six months ended June 30, 2024 and 2023, the Company had immaterial disposals of property and equipment that had been depreciated and amortized in full and had no impact on the accompanying condensed consolidated statements of operations.

5. Intangible Assets

Intangible assets consist of the following (in thousands):

	June 30, 2024	December 31, 2023
Patents	$ 1,290	$ 1,290
Less: accumulated amortization	(607)	(565)
	683	725
Indefinite life logos and trademarks	75	75
Intangible assets, net	$ 758	$ 800

Amortization expense for the three months ended June 30, 2024 and 2023 was $21 thousand and $21 thousand, respectively. Amortization expense for the six months ended June 30, 2024 and 2023 was $42 thousand and $41 thousand, respectively. Impairment charges for the three and six months ended June 30, 2024 and 2023 was $2 thousand and zero. The impairment charges, measured on a cost basis, related to abandonment of certain internally generated and licensed intellectual property in the Company's therapeutic market segment that was determined by management to have no future economic benefit.

6. Convertible Preferred Stock and Stockholders' Deficit

Convertible Preferred Stock

As of June 30, 2024 and December 31, 2023, the Company was authorized to issue 20,000,000 shares of preferred stock, $0.001 par value per share. The Company designated 50 shares of Series D redeemable convertible preferred stock and 10,004,310 shares of Series B, Series G, and Series I-2 non-redeemable convertible preferred stock.

Non-Redeemable Convertible Preferred Stock

The Company's Series B, Series G, and Series I-2 non-redeemable convertible preferred stock has been classified as equity on the accompanying condensed consolidated balance sheets.

The authorized, issued, and outstanding shares of non-redeemable convertible preferred stock as of June 30, 2024 consist of the following:

	Shares Authorized	Shares Issued and Outstanding	Liquidation Preference	Carrying Value
			(in thousands)	
Series B	5,000,000	250,000	$ 494	$ —
Series G	5,000,000	5,000,000	5,000	5
Series I-2	4,310	4,310	4,310	—
Total	10,004,310	5,254,310	$ 9,804	$ 5

The authorized, issued and outstanding shares of non-redeemable convertible preferred stock as of December 31, 2023 consisted of the following:

	Shares Authorized	Shares Issued and Outstanding	Liquidation Preference	Carrying Value
			(in thousands)	
Series B	5,000,000	250,000	$ 486	$ —
Series G	5,000,000	5,000,000	5,000	5
Series I-2	4,310	4,310	4,310	—
Total	10,004,310	5,254,310	$ 9,796	$ 5

Series D Preferred Stock Redemption

The Company's Series D redeemable convertible preferred stock contains a contingent redemption feature that is not solely within the Company's control. Accordingly, the Series D redeemable convertible preferred stock is classified in temporary equity (outside of permanent equity) on the accompanying condensed consolidated balance sheets. As of June 30, 2024, Management concluded the contingency is not probable of being resolved. The Company will continue to monitor the probability of the contingency event at each reporting date.

Dividends

Holders of the Company's convertible preferred stock are entitled to participating dividends with common stock when and if declared by the Company's Board of Directors. The Series D and G convertible preferred stock previously had rights to cumulative dividends in liquidation whether declared or not declared. Since the holders waived the rights to such dividends indefinitely, this does not have an ongoing impact. No dividends have been declared during the six months ended June 30, 2024.

Liquidation

Liquidation preference among classes of preferred shares is first with Series D with priority followed by Series G, Series B and Series I-2 on the proceeds from any sale or liquidation of the Company in an amount equal to the purchase price of shares plus (in the case of the Series B) an amount equal to 1% of the Series B original issue price for every two calendar months from February 1, 2008. Following the satisfaction of the liquidation preferences, all shares of common stock participate in any remaining distribution.

Conversion

The shares of convertible preferred stock are convertible into shares of common stock at any time, at the option of the holder. The conversion rates of the Series B, Series D, and Series I-2 are subject to anti-dilution adjustments whereby, subject to specified exceptions, if the Company issues equity securities or securities convertible into equity at a price below the applicable conversion price of the Series B, Series D, and Series I-2, the conversion price of each such series shall be adjusted downward to equal the price of the new securities. The conversion rate of the Series G is subject to a weighted-average adjustment in the event of the issuance of additional shares of common stock below the conversion price, subject to specified exceptions. The conversion price of the Series I-2 are also subject to certain resets as set forth in the Certificates of Designation, including a reverse stock split.

The following table summarizes the conversion ratio of shares of common stock into which each share of convertible preferred stock can be converted as of June 30, 2024:

	Initial Conversion Price	Current Conversion Price	Conversion Ratio to Common Stock
Series B	$ 75.00	$ 0.12	8.33
Series D	$ 37.50	$ 1.75	57,142.86
Series G	$ 60.00	$ 9.69	0.10
Series I-2	$ 1.75	$ 1.75	571.43

Voting

The holders of Series B, Series D, and Series G are entitled to one vote for each share of common stock into which it would convert. As long as there are at least 10 shares of Series D outstanding, the holders of Series D have (i) the right to nominate and elect two members of the Board of Directors, and (ii) the right to approve specified significant transactions affecting the Company. As long as there are at least 1,000,000 shares of Series G outstanding, the holders of Series G have the initial right to propose the nomination of two members of the Board, at least one of which such nominees shall be subject to the approval of the Company's independent directors, for election by the stockholders at the Company's next annual meeting of stockholders, or, elected by the full board of directors to fill a vacancy, as the case may be. At least one of the two directors nominated by holders of the Series G shall be independent. The holder of Series I-2 has no voting rights, except as required by law.

Common Stock

As of June 30, 2024 and December 31, 2023, the Company was authorized to issue 120,000,000 shares of common stock, $0.001 par value per share.

Equity Incentive Plans

The Company adopted the 2006 Equity Participation Plan (as amended the "2006 Plan"), which provides for the grant of stock options, restricted stock and other equity-based awards. Awards for up to 100,000 shares may be granted to employees, directors and consultants under this Plan. The options granted under the 2006 Plan may be either qualified or non-qualified options. Options may be granted with different vesting terms and expire no later than 10 years from the date of grant. The 2006 Plan expired on November 16, 2016. Options and other equity-based awards granted prior to the expiration of the 2006 Plan will continue in effect until the option or award is exercised or terminates pursuant to its terms. No new awards may be granted under the 2006 Plan following its expiration.

The Company adopted the 2010 Equity Participation Plan, as amended (the "2010 Plan"), which provides for the grant of stock options, restricted stock and other equity-based awards. Awards for up to 9,700,000 shares may be granted to employees, directors and consultants under the 2010 Plan. The options granted under the 2010 Plan may be either qualified or non-qualified options and the 2010 Plan is set to terminate in March 2030. Options may be granted with different vesting terms and expire no later than 10 years from the date of grant.

In June 2020, the Company amended the 2010 Plan to extend the term of the 2010 Plan until March 2030. No other material provisions were amended.

In September 2023, the Company's Board of Directors voted to amend the 2010 Plan ("2010 Plan Amendment") to 1) increase the number of shares that may be issued under the 2010 Plan from 9,700,000 shares to an aggregate of 30,000,000 shares of common stock and 2) increase the number of awards an employee may receive in a calendar year from 800,000 shares to 10,000,000 shares. The majority shareholders approved the 2010 Plan Amendment on September 21, 2023 and the Company filed the Notice of Internet Availability of Information Statement (the "Notice") on September 27, 2023, noting the 2010 Plan Amendment would become effective no earlier than 40 calendar days after the Notice was first made available to stockholders. Accordingly, on November 6, 2023, the 2010 Plan Amendment became effective.

For the three and six months ended June 30, 2024, there were no restricted stock units granted. As of June 30, 2024, there were no restricted stock units outstanding.

Stock Options

The Company's stock option activity, involving stock options issued to employees, directors and consultants under the 2006 Plan and the 2010 Plan, for the six months ended June 30, 2024 is summarized below:

	Number of Outstanding Options	Weighted-Average Exercise Price	Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in thousands)
Outstanding at December 31, 2023	11,807,494	$ 0.64		
Granted	782,222	$ 0.12		
Expired	(15,304)	$ 23.25		
Outstanding at June 30, 2024	12,574,412	$ 0.58	7.42	$ —
Vested and expected to vest at June 30, 2024	12,170,622	$ 0.60	7.37	$ —
Exercisable at June 30, 2024	8,222,746	$ 0.80	6.50	$ —

The fair value of stock options granted is estimated at the date of grant using the Black-Scholes option valuation model. The weighted-average assumptions used in the Black-Scholes option valuation model to determine the fair value of stock options granted for the three and six months ended June 30, 2024 and 2023 were as follows:

	Three and Six Months Ended June 30,	
	2024	2023
Risk-free interest rate	4.36%	3.99%
Expected stock price volatility	108.75%	89.50%
Expected dividend yield	0%	0%
Expected life of options (in years)	5.33	5.6
Weighted-average grant date fair value	$0.06	$0.10

Total stock-based compensation expense recorded in the condensed consolidated statements of operations is as follows (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2024	2023	2024	2023
Cost of sales	$ 1	$ 1	$ 2	$ 2
General and administrative	95	84	197	169
Selling and marketing	1	2	2	3
Research and development	32	21	65	42
Total	$ 129	$ 108	$ 266	$ 216

Unrecognized compensation expense related to stock options as of June 30, 2024 was $465 thousand, which is expected to be recognized over a weighted-average period of 1.58 years.

Common Stock Reserved for Future Issuance

As of June 30, 2024, the Company had shares of common stock reserved for future issuance as follows:

Options outstanding	12,574,412
Common stock available for issuance under the 2010 Plan	17,258,646
Redeemable convertible preferred stock	2,457,143
Non-redeemable convertible preferred stock	5,061,687
Total	37,351,888

7. Related Party Transactions

Related party lease arrangements

On October 26, 2021, the Company and S Real Estate Holdings, LLC, a related party, entered jointly into a lease agreement with Rehco Holdings, LLC (the "Lease"), for the purpose of establishing a new corporate headquarters, including corporate, R&D, and manufacturing operations. The lease commenced on November 1, 2021 and expires on December 31, 2026 with no options to extend or renew. The lease was personally guaranteed by Dr. Russell Kern, the Company's Executive Vice President and Chief Scientific Officer.

On December 15, 2021, the Company and S Real Estate Holdings LLC entered into a co-tenant agreement, whereby the Company and S Real Estate Holdings LLC agreed to allocate portions of the base rent and variable charges, including insurance, maintenance

costs, taxes and operating expenses, between the parties. During the term of the Lease, the Company will be liable for 40% of all costs incurred in connection with the lease, while S Real Estate Holdings LLC will be liable for the remaining 60%.

Related party note payable

Between March 2018 and September 2022, to obtain funding for working capital purposes, the Company borrowed a total of $2.9 million from Dr. Semechkin and issued an unsecured, non-convertible promissory note in the principal amount of $2.9 million (the "Note") to Dr. Semechkin. The outstanding principal amount under the Note accrued interest at a rate of 4.5% per annum. The outstanding principal and accrued interest on the Note were due and payable on March 15, 2023 and could be pre-paid without penalty at any time.

On March 14, 2023, the Noteholder surrendered the September 2022 Note, and the Company issued a new promissory note ("March 2023 Note"), which featured all the same terms as the previously outstanding note, with the exception of an extension of the maturity date from March 15, 2023 to September 15, 2023. The March 2023 Note has a principal balance of $2.9 million, an interest rate of 4.5%, and features optional prepayment terms. There were no debt issuance fees associated with this issuance.

On September 15, 2023, the Noteholder surrendered the March 2023 Note, and the Company issued a new promissory note ("September 2024 Note"), which featured all the same terms as the previously outstanding note, with the exception of an extension of the maturity date from September 15, 2023 to September 15, 2024. The September 2024 Note has a principal balance of $2.9 million, an interest rate of 4.5%, and features optional prepayment terms. There were no debt issuance fees associated with this issuance.

All amendments during the year ended December 31, 2023 qualified as troubled debt restructurings, which did not result in a gain as the carrying amount of the debt was less than the total future cash payments of the restructured debt.

8. Commitments and Contingencies

Leases

The Company has three operating leases for real estate in California and Maryland:

•San Diego, California – corporate headquarters, including corporate, R&D, and manufacturing operations, with a termination date of December 2026, jointly leased with a related party (refer to Note 7 – Related Party Transactions for further discussion) ("headquarter lease"). This lease contains no renewal or term extension options;

•San Diego, California – supplemental office space adjacent to the Company's corporate headquarters with a termination date of December 2026. This lease contains no renewal or term extension options; and

•Frederick, Maryland – mixed laboratory and administrative space with a term date of December 2025. The lease contains one renewal option for an additional three-year term through November 2028. The Company is planning to identify and relocate to larger facilities upon the end of the original term date of December 2025. The renewal option is not included in the lease term as it is not reasonably certain that the Company will exercise its renewal option.

The headquarter lease commenced on November 1, 2021 and expires on December 31, 2026. At commencement, base rent due under the lease was approximately $11 thousand and increases approximately 3.5% per annum over the lease term. The lease is subject to additional variable charges, including insurance, maintenance costs, taxes and operating expenses. Base rent and additional variable charges are shared between the Company and S Real Estate Holdings LLC, a related party, pursuant to a co-tenant agreement between the parties (refer to Note 7 – Related Party Transactions for further discussion). In addition, base rent for months two through five of the lease term were abated by 50%.

In November 2021, the Company entered into an operating lease for supplemental office space adjacent to its new corporate headquarters with the same landlord. The lease commenced on December 1, 2021 and expires on December 31, 2026 and is not subject to the co-tenant agreement with S Real Estate Holdings, LLC. At commencement, base rent due under the supplemental office lease was approximately $4 thousand per month and increases at a fixed amount per annum over the lease term.

The Company's operating leases for real estate are subject to additional variable charges for common area maintenance and other variable costs. Variable costs for the three and six months ended June 30, 2024 and 2023 were immaterial. All operating lease expense is recognized on a straight-line basis over the lease term. For the three months ended both June 30, 2024 and 2023, lease expense totaled $70 thousand and $71 thousand, respectively. For the six months ended June 30, 2024 and 2023, lease expense totaled $140 thousand and $142 thousand, respectively. As of June 30, 2024 and December 31, 2023, the Company had no finance leases.

Maturities of lease liabilities are as follows (in thousands):

Years ending December 31,		
2024 (remaining six months)	$	175
2025		360
2026		119
Total minimum lease payments		654
Less: imputed interest		(66)
Total future minimum lease payments		588
Less: operating lease liabilities, current		(302)
Operating lease liabilities, net of current portion	$	286

9. Employee Retention Credit

Other income is primarily attributable to the one-time receipt of the Employee Retention Tax Credit from the Internal Revenue Service (the "IRS"). As a response to the COVID-19 outbreak, the U.S. government enacted the Coronavirus Aid, Relief, and Economic Security Act (the "CARES Act"), which contained a number of programs to assist workers, families and businesses. Part of the CARES Act provides an Employee Retention Credit ("ERC"), which is a refundable tax credit against certain employment taxes equal to 50% of qualified wages paid, up to $10,000 per employee annually, from March 12, 2020 through January 1, 2021. Additional relief provisions were passed by the United States government, which extended and expanded the qualified wage caps on these credits to 70% of qualified wages paid through June 30, 2021 and 100% of qualified wages paid through December 31, 2021, up to $10,000 per employee per quarter.

On January 6, 2023, the Company filed Form 941-X for the three months ended March 31, June 30 and September 30, 2021 to claim a refund for the ERC. The Company elected to account for the ERC under IAS 20 when there was reasonable assurance of receipt, which was determined to be when the notification of acceptance of Form 941-X was received by the IRS. In June 2023, the Company received confirmation from the IRS that changes to the Company's Q1, Q2 and Q3 941 forms amounting to $224 thousand in the first quarter of 2021, $238 thousand in the second quarter of 2021, and $201 thousand in the third quarter of 2021 had been accepted. The Company received payment from the IRS related to the ERC during the second quarter of 2023 and recorded other income of $663 thousand in the accompanying condensed consolidated statement of operations.

10. Segments

The Company operates the business on the basis of three reporting segments, the parent company and two business units: ISCO – therapeutic market; LCT – biomedical market; and LSC – anti-aging market.

The Company does not measure the performance of its segments on any asset-based metrics. Therefore, segment information is presented only for the results of operations. Results of operations for the three and six months ended June 30, 2024 and 2023 by reporting segment were as follows (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2024	2023	2024	2023
Revenues:				
Biomedical market	$ 2,120	$ 1,626	$ 4,043	$ 3,494
Anti-aging market	211	215	417	433
Total revenues	2,331	1,841	4,460	3,927
Operating expenses:				
Therapeutic market	558	606	1,240	1,183
Biomedical market	1,262	1,052	2,485	2,145
Anti-aging market	362	327	764	741
Total operating expenses	2,182	1,985	4,489	4,069
Operating income (loss):				
Therapeutic market	(558)	(606)	(1,240)	(1,183)
Biomedical market	858	574	1,558	1,349
Anti-aging market	(151)	(112)	(347)	(308)
Total operating income (loss)	149	(144)	(29)	(142)
Other income (expense):				
Therapeutic market	(35)	636	(71)	600
Biomedical market	5	—	5	—
Total other income (expense), net	(30)	636	(66)	600
Net income (loss):				
Therapeutic market	(593)	30	(1,311)	(583)
Biomedical market	863	574	1,563	1,349
Anti-aging market	(151)	(112)	(347)	(308)
Total net income (loss)	$ 119	$ 492	$ (95)	$ 458

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

The following discussion of our financial condition and results of operations should be read in conjunction with our unaudited condensed consolidated financial statements and related notes and other financial information included elsewhere herein. This information should also be read in conjunction with our audited historical consolidated financial statements which are included in our Form 10-K for the fiscal year ended December 31, 2023 ("Form 10-K"). The discussion contains forward-looking statements, such as our plans, expectations and intentions (including those related to clinical trials and business and expense trends), that are based upon current expectations and that involve risks and uncertainties. Our actual results may differ significantly from management's expectations. The factors that could affect these forward-looking statements are discussed in the Risk Factors included in our Form 10-K. This discussion should not be construed to imply that the results discussed herein will necessarily continue into the future, or that any expectations expressed herein will necessarily be indicative of actual operating results in the future. Such discussion represents only the best assessment by our management.

Business Overview

We are a clinical stage biotechnology company focused on therapeutic and biomedical product development with multiple long-term therapeutic opportunities and two revenue-generating businesses offering potential for increased future revenue. We have generated aggregate product revenues from our two commercial businesses of $2.3 million and $1.8 million for the three months ended June 30, 2024 and 2023, respectively, and $4.5 million and $3.9 million for the six months ended June 30, 2024 and 2023, respectively. We currently have no revenue generated from our principal operations in therapeutic and clinical product development.

Our products are based on multi-decade experience with human cell culture and a proprietary type of pluripotent stem cells, human parthenogenetic stem cells ("hpSCs"). Our hpSCs are comparable to human embryonic stem cells ("hESCs") in that they have the potential to be differentiated into many different cells in the human body. However, the derivation of hpSCs does not require the use of fertilized eggs or the destruction of viable human embryos and also offers the potential for the creation of immune-matched cells and tissues that are less likely to be rejected following transplantation. Our collection of hpSCs, known as UniStemCell™, currently consists of 15 stem cell lines. We have facilities and manufacturing protocols that comply with the requirements of Good Manufacturing Practice (GMP) standards as promulgated by the U.S. Code of Federal Regulations and enforced by the United States Food and Drug Administration ("FDA").

Market Opportunity and Growth Strategy

Therapeutic Market – Clinical Applications of hpSCs for Disease Treatments

We are developing different cell types from our stem cells that may result in therapeutic products. We focus on applications where cell and tissue therapy is already proven but where there is an insufficient supply of functional cells or tissue.

We believe that the most promising potential clinical applications of our technology are Parkinson's disease ("PD"), traumatic brain injury ("TBI"), and stroke. Using our proprietary technologies and know-how, we are creating neural stem cells from hpSCs as a potential treatment of PD, TBI, and stroke.

PD: Our most advanced project is the neural stem cell program for the treatment of Parkinson's disease. In 2013, we published in Nature Scientific Reports the basis for our patent on a new method of manufacturing neural stem cells, which is used to produce the clinical-grade cells necessary for future clinical studies and commercialization. In 2014, we completed the majority of the preclinical research, establishing the safety profile of NSC in various animal species, including non-human primates. In June 2016, we published the results of a 12-month pre-clinical non-human primate study, which demonstrated the safety, efficacy and mechanism of action of the ISC- hpNSC®. In 2017, we dosed four patients in our Phase I trial of ISC-hpNSC®, human parthenogenetic stem cell-derived neural stem cells for the treatment of Parkinson's disease. We reported 12-month results from the first cohort and 6-month interim results of the second cohort at the Society for Neuroscience annual meeting (Neuroscience 2018) in November 2018. In April 2019, we announced the completion of subject enrollment, with the 12th subject receiving a transplantation of the highest dose of cells. There have been no safety signals or serious adverse effects seen to date as related to the transplanted ISC-hpNSC® cells.

We announced the successful completion of the dose escalating phase 1 clinical trial in June 2021. In terms of preliminary efficacy, where scores are compared against baseline before transplantation, we observed a potential dose-dependent response with an apparent peak effectiveness at our middle dose. The % OFF-Time, which is the time during the day when levodopa medication is not performing optimally and PD symptoms return, decreased an average 47% from the baseline at 12 months post transplantation in cohort 2. This trend continued through 24 months where the % OFF-Time in the second cohort dropped by 55% from the initial reading. The same was true for % ON-Time without dyskinesia, which is the time during the day when levodopa medication is performing optimally without dyskinesia. The % ON-Time increased an average of 42% above the initial evaluation at 12 months post-transplantation in the second cohort.

Stroke: In August 2014, we announced the launch of a stroke program, evaluating the use of ISC-hpNSC® transplantation for the treatment of ischemic stroke using a rodent model of the disease. The Company has a considerable amount of safety data on ISC-hpNSC® from the Parkinson's disease program and, as there is evidence that transplantation of ISC-hpNSC® may improve patient

outcomes as an adjunctive therapeutic strategy in stroke, having a second program that can use this safety dataset is therefore a logical extension. In 2015, the Company together with Tulane University demonstrated that NSC can significantly reduce neurological dysfunction after a stroke in animal models.

TBI: In October 2016, we announced the results of the pre-clinical rodent study, evaluating the use of ISC-hpNSC® transplantation for the treatment of TBI. The study was conducted at the University of South Florida Morsani College of Medicine. We demonstrated that animals receiving injections of ISC-hpNSC® displayed the highest levels of improvements in cognitive performance and motor coordination compared to vehicle control treated animals. In February 2019, we published the results of the pre-clinical study in Theranostics, a prestigious peer-reviewed medical journal. The publication titled, "Human parthenogenetic neural stem cell grafts promote multiple regenerative processes in a traumatic brain injury model," demonstrated that the clinical-grade neural stem cells used in our Parkinson's disease clinical trial, ISC-hpNSC®, significantly improved TBI-associated motor, neurological, and cognitive deficits without any safety issues.

Anti-Aging Cosmetic Market – Skin Care Products

Our wholly owned subsidiary Lifeline Skin Care, Inc. ("LSC") develops, manufactures and sells anti-aging skin care products based on two core technologies: encapsulated extract derived from hpSC and specially selected targeted small molecules. LSC's products include:

•ProPlus Advanced Defense Complex

•ProPlus Advanced Recovery Complex

•ProPlus Eye Firming Complex

•ProPlus Neck Firming Complex

•ProPlus Advanced Aquoues Treatment

•ProPlus Collagen Booster (Advanced Molecular Serum)

•ProPlus Elastin Booster

•ProPlus Brightening Toner

LSC's products are regulated as cosmetics. LSC's products are sold domestically through a branded website, Amazon, and ecommerce partners.

Biomedical Market – Primary Human Cell Research Products

Our wholly owned subsidiary Lifeline Cell Technology, LLC ("LCT") develops, manufactures and commercializes approximately 200 human cell culture products, including frozen human "primary" cells and reagents (called "media"), which are needed to grow, maintain, and differentiate the cells. LCT's scientists have used a standardized, methodical, scientific approach to basal medium optimization to systematically produce optimized products designed to culture specific human cell types and to elicit specific cellular behaviors. These techniques can also be used to produce products that do not contain non-human animal proteins, a feature desirable to the research and therapeutic markets. Each LCT cell product is quality tested for the expression of specific markers (to assure the cells are the correct type), proliferation rate, viability, morphology and absence of pathogens. Each cell system also contains associated donor information and all informed consent requirements are strictly followed. LCT's research products are marketed and sold by its internal sales force, original equipment manufacturing ("OEM") partners and LCT brand distributors in Europe and Asia.

Results of Operations

Comparison of the Three Months Ended June 30, 2024 and 2023

The following table summarizes our results of operations for the three months ended June 30, 2024 and 2023 (in thousands, except percentages):

	Three Months Ended June 30,			
	2024	2023	$ Change	% Change
Product sales	$ 2,331	$ 1,841	$ 490	27%
Cost of sales	913	713	200	28%
Profit margin	1,418	1,128	290	26%
As a % of revenues	*61%*	*61%*		
General and administrative	884	918	(34)	-4%
Selling and marketing	302	309	(7)	-2%
Research and development	83	45	38	84%
Other income (expense)	(30)	636	—	0%
Net income	$ 119	$ 492	$ (373)	-76%
As a % of revenues	*5%*	*27%*		

Product sales, net

Product sales for the three months ended June 30, 2024 were $2,331 thousand compared to $1,841 thousand for the three months ended June 30, 2023. The increase of $490 thousand, or 27%, was primarily attributable to an increase in OEM sales from our Biomedical market segment, including an increase of $446 thousand from our media and other products sales and an increase of $48 thousand from our cell product sales. The net increase in product sales from our Biomedical market segment is partially offset by a decrease in skin care product line sales of approximately $4 thousand.

Cost of sales

Cost of sales for the three months ended June 30, 2024 were $913 thousand, compared to $713 thousand for the three months ended June 30, 2023. The increase of $200 thousand, or 28%, was a result of a net increase of approximately $170 thousand in cost of goods sold due to an overall increase in product sales from our Biomedical market segment and an increase of $30 thousand in cost of goods sold from our skin care market segment as a result of inventory adjustments related to scrap and expired product.

Profit margins remained steady at 61% for both the three months ended June 30, 2024 and 2023. There was a slight decrease in profit margins related to inventory adjustments that was fully offset by an increase in profit margins related to our Biomedical market segment, which comprised over 90% of our product sales for the three months ended June 30, 2024.

Cost of sales consists primarily of salaries and benefits associated with employee efforts expended directly on the production of the Company's products, as well as related direct materials, general laboratory supplies and the allocation of overhead. We plan to continue to refine our manufacturing processes and supply chain management to improve the cost of sales as a percentage of revenue for both our LCT and LSC segments.

General and administrative expenses

General and administrative expenses for the three months ended June 30, 2024 were $884 thousand, compared to $918 thousand for the three months ended June 30, 2023. The decrease of $34 thousand, or 4%, was primarily attributable to a net decrease of approximately $86 thousand in consulting related costs related to fees paid in connection with the Employment Tax Credit refund that was filed and claimed during the three months ended June 30, 2023. The net decrease in general and administrative expenses was partially offset by a net increase of approximately $20 thousand in personnel-related costs specifically related to benefit costs, as well as an increase of approximately $35 thousand in audit and legal fees and patent impairment charges.

Our general and administrative expenses consist primarily of employee-related expenses including salaries, bonuses, benefits, and stock-based compensation. Other significant costs include facility costs not otherwise included in or allocated to other departments, legal fees not relating to patents and corporate matters, and fees for accounting and consulting services.

Selling and marketing expenses

Selling and marketing expenses for the three months ended June 30, 2024 were $302 thousand, compared to $309 thousand for the three months ended June 30, 2023. The decrease of $7 thousand, or 2%, was primarily attributable to a decrease of approximately $22 thousand in personnel related costs, including commissions expense, consulting fees, dues, and merchandise costs, partially offset by an increase of approximately $15 thousand in temporary staffing costs and website advertising related costs.

Our selling and marketing expenses consist primarily of employee-related expenses including salaries, bonuses, benefits, and stock-based compensation for our Biomedical and Anti-aging cosmetic businesses. Other significant costs include facility costs not otherwise

included in or allocated to other departments, as well as marketing material costs, permits and licenses for ecommerce, and other advertising expenses.

Research and development expenses

Research and development expenses for the three months ended June 30, 2024 were $83 thousand, compared to $45 thousand for the three months ended June 30, 2023. The increase of $38 thousand, or 84%, was a result of an increase of approximately $33 thousand in personnel-related costs, specifically an increase in stock-based compensation expense from grants during the current period, and a decrease of approximately $16 thousand from the Australian research and development tax credit. The increase is partially offset by a decrease of approximately $12 thousand in consulting and other general costs.

Our research and development efforts are primarily focused on the development of treatments for Parkinson's disease, traumatic brain injury, and stroke. These projects are long-term investments that involve developing both new stem cell lines and new differentiation techniques that can provide higher purity populations of functional cells. Research and development expenses are expensed as incurred and are accounted for on a project-by-project basis. However, much of our research has potential applicability to each of our projects.

Other income (expense), net

Other income (expense), net for the three months ended June 30, 2024 was $(30) thousand compared to other income (expense), net for the three months ended June 30, 2023 of $636 thousand. The decrease in other income (expense), net of $671 thousand was largely attributable to the Employment Tax Credit refund (refer to Note 9 within the accompanying condensed consolidated financial statements for further discussion) received during the three months ended June 30, 2023, which was partially offset by other expense. Other expense in both periods relate to interest expense on our related party note payable.

Comparison of the Six Months Ended June 30, 2024 and 2023

The following table summarizes our results of operations for the six months ended June 30, 2024 and 2023 (in thousands, except percentages):

	Six Months Ended June 30,			
	2024	2023	$ Change	% Change
Product sales	$ 4,460	$ 3,927	$ 533	14%
Cost of sales	1,800	1,537	263	17%
Profit margin	2,660	2,390	270	11%
As a % of revenues	*60%*	*61%*		
General and administrative	1,793	1,718	75	4%
Selling and marketing	636	624	12	2%
Research and development	260	190	70	37%
Other income (expense)	(66)	600	—	0%
Net income (loss)	$ (95)	$ 458	$ (553)	-121%
As a % of revenues	*-2%*	*12%*		

Product sales, net

Product sales for the six months ended June 30, 2024 were $4,460 thousand compared to $3,927 thousand for the six months ended June 30, 2023. The increase of $533 thousand, or 14%, was primarily attributable to an increase of approximately $767 thousand in our media product sales, partially offset by a decrease of approximately $218 thousand in our cell and other product sales in our Biomedical market segment. The net increase in product sales from our Biomedical market segment is partially offset by a decrease in product sales from our skin care product line of approximately $16 thousand.

Cost of sales

Cost of sales for the six months ended June 30, 2024 were $1,800 thousand, compared to $1,537 thousand for the six months ended June 30, 2023. The increase of $263 thousand, or 17%, was primarily attributable to an increase in cost of sales driven by an increase in product sales in our Biomedical market segment of approximately $432 thousand, partially offset by approximately $172 thousand in favorable manufacturing variances. There was a net increase in cost of sales related to our skin care product sales in our Anti-aging market segment of approximately $3 thousand, which was primarily attributable to inventory adjustments related to scrap and expired product, partially offset by an overall decrease in manufacturing costs in accordance with a decrease in our product sales.

Profit margins have decreased by approximately 1% for the six months ended June 30, 2024, as compared to the six months ended June 30, 2023 due to decreased margins from our skin care line.

Cost of sales consists primarily of salaries and benefits associated with employee efforts expended directly on the production of the Company's products, as well as related direct materials, general laboratory supplies and the allocation of overhead. We plan to continue

to refine our manufacturing processes and supply chain management to improve the cost of sales as a percentage of revenue for both our LCT and LSC segments.

General and administrative expenses

General and administrative expenses for the six months ended June 30, 2024 were $1,793 thousand, compared to $1,718 thousand for the six months ended June 30, 2023. The increase of $75 thousand, or 4%, was primarily attributable to a net increase of approximately $68 thousand in personnel-related costs, including stock based compensation, combined with an increase of approximately $96 thousand in audit and accounting fees, patent impairment charges, and other general costs, partially offset by a decrease of approximately $78 thousand in consulting fees, specifically relating to fees incurred from the Employment Tax Credit refund during the three months ended June 30, 2023, and a decrease of approximately $11 thousand in insurance costs.

Our general and administrative expenses consist primarily of employee-related expenses including salaries, bonuses, benefits, and stock-based compensation. Other significant costs include facility costs not otherwise included in or allocated to other departments, legal fees not relating to patents and corporate matters, and fees for accounting and consulting services.

Selling and marketing expenses

Selling and marketing expenses for the six months ended June 30, 2024 were $636 thousand, compared to $624 thousand for the six months ended June 30, 2023. The increase of $12 thousand, or 2%, was primarily attributable to an increase of approximately $37 thousand in temporary salaries and consulting fees, partially offset by a decrease of approximately $23 thousand in personnel-related costs and advertising and merchandising costs.

Our sales and marketing expenses consist primarily of employee-related expenses including salaries, bonuses, benefits, and share-based compensation for our Biomedical and anti-aging cosmetic businesses. Other significant costs include facility costs not otherwise included in or allocated to other departments, as well as marketing material costs, permits and licenses for ecommerce, and other advertising expenses.

Research and development expenses

Research and development expenses for the six months ended June 30, 2024 were $260 thousand, compared to $190 thousand for the six months ended June 30, 2023. The increase of $70 thousand, or 37%, was primarily attributable to an increase of approximately $67 thousand in personnel-related costs, including stock based compensation, and a decrease of approximately $16 thousand in the Australian research and development tax credit, partially offset by a decrease of approximately $13 thousand in consulting costs.

Our research and development efforts are primarily focused on the development of treatments for Parkinson's disease, traumatic brain injury, and stroke. These projects are long-term investments that involve developing both new stem cell lines and new differentiation techniques that can provide higher purity populations of functional cells. Research and development expenses are expensed as incurred and are accounted for on a project-by-project basis. However, much of our research has potential applicability to each of our projects.

Other income (expense), net

Other income (expense), net for the six months ended June 30, 2024 was $(66) thousand, compared to other income (expense), net of $600 thousand for the six months ended June 30, 2023. The decrease in other income (expense), net of $671 thousand was largely attributable to the Employment Tax Credit refund (see Note 9 within the accompanying condensed consolidated financial statements for further discussion) received during the three months ended June 30, 2023, which was partially offset by other expense. Other expense in both periods relate to interest expense on our related party note payable.

Liquidity and Capital Resources

The Company enters into contracts in the normal course of business with various third-party consultants and contract research organizations ("CRO") for preclinical research, clinical trials and manufacturing activities. These contracts generally provide for termination upon notice. Actual expenses associated with these arrangements may be higher or lower due to various reasons, including but not limited to, progress of our development products and enrollment in clinical trials. Other short-term and long terms commitments that would affect liquidity include lease obligations as well as related party debt repayments.

As of June 30, 2024, we had an accumulated deficit of approximately $110.6 million and have historically incurred net losses and negative operating cash flows on an annual basis. Substantially all of our operating losses have resulted from the funding of our research and development programs and general and administrative expenses associated with our operations. We incurred net income of $95 thousand during the six months ended June 30, 2024 and a net loss of $458 thousand during the six months ended June 30, 2023. As of June 30, 2024, we had cash of approximately $1.3 million, compared to $1.6 million as of December 31, 2023. Our primary use of cash is to continue to fund our research and development programs, while maintaining and growing our revenue generating businesses.

Cash Flows

Comparison of the Six Months Ended June 30, 2024 and 2023

The following table provides information regarding our cash flows for the six months ended June 30, 2024 and 2023 (in thousands):

	Six Months Ended June 30,	
	2024	2023
Net cash (used in) provided by operating activities	$ (170)	$ 706
Net cash used in investing activities	(128)	(66)
Net (decrease) increase in cash	$ (298)	$ 640

Operating Cash Flows

For the six months ended June 30, 2024, net cash used in operating activities was $170 thousand was primarily attributable to our net loss of $95 thousand and net changes in operating assets and liabilities of $654 thousand, consisting of increases in accounts receivable, net of $236 thousand, prepaid expenses and other current assets of $208 thousand, and inventories of $175 thousand and a decrease in operating lease liabilities of $133. The increase is partially offset by an increase in accrued liabilities of $87 thousand and accounts payable of $13 thousand, combined with net non-cash adjustments of $579 thousand, pertaining to recurring non-cash expenses, such as stock-based compensation, depreciation and amortization expense, non-cash operating lease expense, non-cash interest expense on our related party note payable, and changes in inventory reserve, and non-recurring patent impairment charges.

For the six months ended June 30, 2023, net cash provided by operating activities was $706 thousand, attributable to our net income of $458 thousand and net recurring non-cash adjustments of $491 thousand, offset by net changes in operating assets and liabilities of $243 thousand.

Investing Cash Flows

Net cash used in investing activities for the six months ended June 30, 2024 was $128 thousand, compared to $66 thousand for the six months ended June 30, 2023. The increase is wholly attributable to purchases of property and equipment.

Funding Requirements

Management continues to evaluate various financing sources and options to raise working capital to help fund our current research and development programs and operations. We will need to obtain significant additional capital from equity and/or debt financings, license arrangements, grants and/or collaborative research arrangements to sustain our operations and develop products. Unless we obtain additional financing, we do not have sufficient cash on hand to sustain our operations at least through one year after the issuance date. The timing and degree of any future capital requirements will depend on many factors, including:

- the accuracy of the assumptions underlying our estimates for capital needs;
- the extent that revenues from sales of LSC and LCT products cover the related costs and provide capital;
- scientific progress in our research and development programs;
- the magnitude and scope of our research and development programs and our ability to establish, enforce and maintain strategic arrangements for research, development, clinical testing, manufacturing and marketing;
- our progress with preclinical development and clinical trials;
- the extent to which third party interest in Company's research and commercial products can be realized through effective partnerships;
- the time and costs involved in obtaining regulatory approvals;
- the costs involved in preparing, filing, prosecuting, maintaining, defending and enforcing patent claims; and
- the number and type of product candidates that we pursue.

Our failure to raise capital or enter into applicable arrangements when needed would have a negative impact on our financial condition. Additional debt financing may be expensive and require us to pledge all or a substantial portion of its assets. Further, if additional funds are obtained through arrangements with collaborative partners, these arrangements may require us to relinquish rights to some of its technologies, product candidates or products that we would otherwise seek to develop and commercialize on its own. If sufficient capital is not available, we may be required to delay, reduce the scope of or eliminate one or more of its product initiatives.

We currently have no revenue generated from our principal operations in therapeutic and clinical product development through research and development efforts. There can be no assurance that we will be successful in maintaining our normal operating cash flow

and obtaining additional funds and that the timing of our capital raising or future financing will result in cash flow sufficient to sustain our operations at least through one year after the issuance date.

Based on the factors above, there is substantial doubt about our ability to continue as a going concern. The consolidated financial statements were prepared assuming that we will continue to operate as a going concern. The consolidated financial statements do not include any adjustments to reflect the possible future effects on the recoverability and classification of assets or the amounts and classification of liabilities that may result from the outcome of this uncertainty. Management's plans in regard to these matters are focused on managing our cash flow, the proper timing of our capital expenditures, and raising additional capital or financing in the future.

Critical Accounting Estimates

Our management's discussion and analysis of our financial condition and results of operations are based on our condensed consolidated financial statements, which have been prepared in accordance with generally accepted accounting principles in the United States of America and the rules and regulations of the Securities and Exchange Commission. The preparation of these condensed consolidated financial statements requires us to make judgments and estimates that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the condensed consolidated financial statement, and the reported amounts of revenues, costs and expenses during the reporting periods.

Our estimates are based on our historical experience, known trends and events, 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 and amount of expense recognized that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions. We evaluate our estimates and assumptions on an ongoing basis. The effects of material revisions in estimates, if any, will be reflected in the consolidated financial statements prospectively from the date of the change in estimates.

There have been no material changes to our critical accounting policies and estimates during the six months ended June 30, 2024 from those disclosed in "Part II – Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations" included in our Annual Report on Form 10-K.

Recently Issued Accounting Pronouncements

A description of recently issued accounting pronouncements that may potentially impact our financial position and results of operations is disclosed in Note 1 – Description of Business, Basis of Presentation, and Summary of Significant Accounting Policies to our condensed consolidated financial statements of this Quarterly Report on Form 10-Q.

Contractual Obligations and Commitments

There have been no material changes to our contractual obligations and commitments outside the ordinary course of business during the six months ended June 30, 2024 from those disclosed in "Part II – Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations" included in our Annual Report on Form 10-K.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

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

Item 4. Controls and Procedures

Disclosure Controls and Procedures

Evaluation of Disclosure Controls and Procedures

As required by Rule 13a-15(e) and 15d-15(e) under the Exchange Act, the Company, with the participation of management, including our Chief Executive Officer and Principal Financial Officer, evaluated the effectiveness of our disclosure controls and procedures (as defined in such rules) as of the end of the period covered by this report. Based on this evaluation, our Chief Executive Officer and Principal Financial Officer concluded that, at June 30, 2024, our disclosure controls and procedures were effective.

Disclosure controls and procedures are controls and other procedures that are designed to ensure that information required to be disclosed in our reports filed or submitted under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed in our reports filed under the Exchange Act is accumulated and communicated to our management, including our Chief Executive Officer and Principal Financial Officer, or persons performing similar functions, as appropriate, to allow timely decisions regarding required disclosure.

Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the control. The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions; over time, controls may become inadequate because of changes in conditions, or the degree of compliance with the policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

Changes in Internal Control Over Financial Reporting

There were no changes in our internal controls during the six months ended June 30, 2024 that materially affected, or are reasonably likely to materially affect, our internal controls over financial reporting.

PART II – OTHER INFORMATION

Item 1. Legal Proceedings

None.

Item 1A. Risk Factors

There have been no material changes to the risk factors disclosed in "Part I – Item 1A. Risk Factors" included in our Annual Report on Form 10-K for the year ended December 31, 2023 filed with the SEC on March 28, 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

During the quarter ended June 30, 2024, none of our directors or officers (as defined in Rule 16a-1(f) of the Securities Exchange Act of 1934) adopted, terminated or modified a Rule 10b5-1 trading arrangement or non-Rule 10b5-1 trading arrangement (as such terms are defined in Item 408 of Regulation S-K).

Item 6. Exhibits

Exhibit Index

Exhibit	Description
3.1	Certificate of Incorporation (incorporated by reference to Exhibit 3.4 of the Registrant's Form 10-SB filed on April 4, 2006).
3.2	Certificate of Amendment of Certificate of Incorporation (incorporated by reference to Exhibit 3.1 of the Registrant's Preliminary Information Statement on Form 14C filed on December 29, 2006).
3.3	Certificate of Amendment of Certificate of Incorporation (incorporated by reference to Exhibit 3.1 of the Registrant's Form 8-K filed on June 4, 2012).
3.4	Certificate of Amendment of Certificate of Incorporation (incorporated by reference to Exhibit 3.1 of the Registrant's Form 8-K filed on May 14, 2014).
3.5	Certificate of Amendment of Certificate of Incorporation (incorporated by reference to Exhibit 3.1 of the Registrant's Form 8-K filed on July 28, 2015).
3.6	Certificate of Amendment of Certificate of Incorporation (incorporated by reference to Exhibit 3.1 of the Registrant's Form 8-K filed on May 19, 2016).
3.7	Amended and Restated Bylaws of the Registrant (incorporated by reference to Exhibit 3.1 of the Registrant's Form 8-K filed on May 6, 2011).
4.1	Form of Specimen Common Stock Certificate (incorporated by reference to Exhibit 4.1 of the Registrant's Form 10-KSB filed on April 9, 2007).
4.2	Certification of Designation of Series B Preferred Stock (incorporated by reference to Exhibit 4.1 of the Registrant's Form 8-K filed on May 12, 2008).
4.3	Certification of Designation of Series D Preferred Stock (incorporated by reference to Exhibit 10.2 of the Registrant's Form 8-K filed on January 5, 2009).
4.4	Certificate of Designation of Series G Preferred Stock (incorporated by reference to Exhibit 3.1 of the Registrant's Form 8-K filed on March 14, 2012).
4.5	Certificate of Preferences, Rights and Limitations of Series I-2 Convertible Preferred Stock (incorporated by reference to Exhibit 3.2 of the Registrant's Form 8-K filed on March 10, 2016).
31.1*	Rule 13a-14(a)/15d-14(a) Certification of Chief Executive Officer.
31.2*	Rule 13a-14(a)/15d-14(a) Certification of Chief Financial Officer.
32.1*	Section 1350 Certification of Chief Executive Officer.
32.2*	Section 1350 Certification of Chief Financial Officer.
101.INS*	Inline XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document
101.SCH*	Inline XBRL Taxonomy Extension Schema with Embedded Linkbase Documents
104*	Cover Page Interactive Data File (embedded within the Inline XBRL document)

* Filed herewith.

SIGNATURES

Pursuant to the requirements of the Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Dated: August 13, 2024

INTERNATIONAL STEM CELL CORPORATION

By:	/s/ ANDREY SEMECHKIN
Name:	**Andrey Semechkin**
Title:	**Chief Executive Officer (Principal Executive Officer)**
By:	/s/ RUSSELL KERN
Name:	**Russell Kern**
Title:	**Executive Vice President and Chief Scientific Officer (Principal Financial Officer)**

Exhibit 31.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER

I, Andrey Semechkin, Chief Executive Officer of International Stem Cell Corporation, certify that:

1. I have reviewed this quarterly report on Form 10-Q of International Stem Cell 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(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

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

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

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

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

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

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

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

Date: August 13, 2024

By: /s/ ANDREY SEMECHKIN
Andrey Semechkin
Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER

I, Russell Kern, Executive Vice President and Chief Scientific Officer of International Stem Cell Corporation, certify that:

1. I have reviewed this quarterly report on Form 10-Q of International Stem Cell 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(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

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

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

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

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

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

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

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

Date: August 13, 2024

By: /s/ RUSSELL KERN
Russell Kern
Executive Vice President and Chief Scientific Officer (Principal Financial Officer)

Exhibit 32.1

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

In connection with the Quarterly Report on Form 10-Q of International Stem Cell Corporation (the "Company") for the quarter ended June 30, 2024, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Andrey Semechkin, Chief Executive Officer of the Company, hereby certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

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

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

Date: August 13, 2024

By: /s/ ANDREY SEMECHKIN
Andrey Semechkin
Chief Executive Officer
(Principal Executive Officer)

Exhibit 32.2

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

In connection with the Quarterly Report on Form 10-Q of International Stem Cell Corporation (the "Company") for the quarter ended June 30, 2024, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Russell Kern, Executive Vice President and Chief Scientific Officer of the Company, hereby certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

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

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

Date: August 13, 2024

By: /s/ RUSSELL KERN
Russell Kern
Executive Vice President and Chief Scientific Officer (Principal Financial Officer)