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

FORM 10-Q

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

For the quarterly period ended March 31, 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 001-41596

CADRENAL THERAPEUTICS, INC.
(Exact name of registrant as specified in its charter)

Delaware	**88-0860746**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
822 A1A North, Suite 306 Ponte Vedra, Florida	**32082**
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code: **(904) 300-0701**

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

Title of each class	**Trading symbol(s)**	**Name of each exchange on which registered**
Common Stock, par value $0.001 per share	CVKD	The Nasdaq Stock Market, LLC (The Nasdaq Capital Market)

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act:

Large accelerated filer	☐	Accelerated filer	☐
Non-accelerated filer	☒	Smaller reporting company	☒
		Emerging growth company	☒

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

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

As of May 9, 2024, there were 16,008,469 outstanding shares of common stock, par value $0.001 per share, of Cadrenal Therapeutics, Inc.

CADRENAL THERAPEUTICS, INC.

QUARTERLY REPORT ON FORM 10-Q

FOR THE QUARTERLY PERIOD ENDED MARCH 31, 2024

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PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

CADRENAL THERAPEUTICS, INC.
BALANCE SHEETS

	March 31, 2024 (unaudited)	December 31, 2023
Assets:		
Current assets:		
Cash and cash equivalents	$ 6,566,418	$ 8,402,500
Prepaid expenses	293,767	89,673
Deferred offering costs	167,844	-
Total current assets	7,028,029	8,492,173
Property, plant and equipment, net	1,690	2,287
Right of use assets	14,920	20,998
Other assets	3,792	3,792
Total assets	$ 7,048,431	$ 8,519,250
Liabilities and Stockholders' Equity:		
Current liabilities:		
Accounts payable	$ 400,373	$ 167,319
Accrued liabilities	440,775	638,206
Operating lease liability	15,167	21,350
Total current liabilities	856,315	826,875
Total liabilities	856,315	826,875
Stockholders' equity:		
Common stock, $0.001 par value; 75,000,000 shares authorized, 16,008,469 shares issued and outstanding as of March 31, 2024; 13,022,754 shares issued and outstanding as of December 31, 2023	16,008	13,022
Additional paid-in capital	22,910,811	22,750,768
Accumulated deficit	(16,734,703)	(15,071,415)
Total stockholders' equity	6,192,116	7,692,375
Total liabilities and stockholders' equity	$ 7,048,431	$ 8,519,250

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

CADRENAL THERAPEUTICS, INC.
STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS
(unaudited)

	Three Months Ended March 31,	
	2024	2023
Operating expenses:		
General and administrative expenses	$ 1,125,993	$ 964,732
Research and development expenses	629,025	3,235,317
Depreciation expense	597	190
Total operating expenses	1,755,615	4,200,239
Loss from operations	(1,755,615)	(4,200,239)
Other (income) expense:		
Interest and dividend income	(92,327)	-
Interest expense	-	3,534
Interest expense, amortization of debt discount	-	13,567
Change in fair value of derivative liabilities	-	216,095

Loss on extinguishment of debt	-	740,139
Total other (income) expense	(92,327)	973,335
Net loss and comprehensive loss	$ (1,663,288)	$ (5,173,574)
Net loss per common share, basic and diluted	$ (0.10)	$ (0.48)
Weighted average number of common shares used in computing net loss per common share, basic and diluted	16,008,469	10,772,493

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

CADRENAL THERAPEUTICS, INC.
STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY
(unaudited)

For the three months ended March 31, 2023

	Common Stock		Additional Paid-In	Accumulated	Total Stockholders' Equity
	Shares	Amount	Capital	Deficit	(Deficit)
Balance, December 31, 2022	8,193,875	$ 8,194	$ 1,154,985	$ (6,714,329)	$ (5,551,150)
Issuance of common shares in initial public offering, net of offering costs	1,400,000	1,400	5,407,175	-	5,408,575
Issuance of common shares to settle convertible debt	1,140,700	1,140	1,139,560	-	1,140,700
De-recognition of derivative liabilities	-	-	4,596,039	-	4,596,039
Issuance of common shares from exercise of warrants	250,000	250	249,750	-	250,000
Issuance of common shares to settle asset purchase obligation	600,000	600	2,999,400	-	3,000,000
Issuance of restricted common shares for prepaid consulting services	77,340	77	108,199	-	108,276
Equity-based compensation - options and restricted stock	60,839	61	286,335	-	286,396
Net loss	-	-	-	(5,173,574)	(5,173,574)
Balance, March 31, 2023	11,722,754	$ 11,722	$ 15,941,443	$ (11,887,903)	$ 4,065,262

For the three months ended March 31, 2024

	Common Stock		Additional Paid-In	Accumulated	Total Stockholders'
	Shares	Amount	Capital	Deficit	Equity
Balance, December 31, 2023	13,022,754	$ 13,022	$ 22,750,768	$ (15,071,415)	$ 7,692,375
Issuance of common shares from exercise of pre-funded warrants	2,985,715	2,986	(2,688)	-	298
Equity-based compensation - options	-	-	162,731	-	162,731
Net loss	-	-	-	(1,663,288)	(1,663,288)
Balance, March 31, 2024	16,008,469	$ 16,008	$ 22,910,811	$ (16,734,703)	$ 6,192,116

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

CADRENAL THERAPEUTICS, INC.
STATEMENTS OF CASH FLOWS
(unaudited)

	Three Months Ended March 31,	
	2024	2023
Cash flows from operating activities:		
Net loss	$ (1,663,288)	$ (5,173,574)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation expense	597	190
Equity-based compensation	162,731	286,396
Amortization of debt discount	-	13,567
Change in fair value of derivative liabilities	-	216,095
Loss on extinguishment of debt	-	740,139
Non-cash lease expense	(105)	89
Issuance of shares to settle asset purchase agreement	-	3,000,000
Changes in operating assets and liabilities:		
Prepaid expenses	(204,094)	(279,912)
Deferred offering costs	(167,844)	672,295
Other assets	-	2,196
Accounts payable	233,054	(285,330)
Accrued liabilities	(197,431)	(604,944)
Net cash used in operating activities	(1,836,380)	(1,412,794)
Cash flows from financing activities:		
Proceeds from exercise of warrants	298	250,000

Repayment of promissory notes	-	(250,000)
Proceeds from sale of common stock in initial public offering, net of offering costs	-	5,408,575
Net cash provided by financing activities	298	5,408,575
Net change in cash	(1,836,082)	3,995,781
Cash and cash equivalents – beginning of the period	8,402,500	32,586
Cash and cash equivalents – end of the period	$ 6,566,418	$ 4,028,367
Supplemental disclosure of non-cash financing activity:		
Issuance of common shares to settle convertible debt	**$** -	**$** 3,000,000
De-recognition of derivative liabilities	**$** -	**$** 4,596,039
Issuance of common shares for prepaid consulting services	**$** -	**$** 108,276

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

CADRENAL THERAPEUTICS, INC.
Notes to Unaudited Financial Statements

Note 1. Description of Business and Summary of Significant Accounting Policies

Cadrenal Therapeutics, Inc. (the "Company" or "Cadrenal") was incorporated on January 25, 2022 in the State of Delaware and is headquartered in Ponte Vedra, Florida. Cadrenal is developing tecarfarin for unmet needs in anticoagulation therapy. Tecarfarin is a late-stage novel oral and reversible anticoagulant (blood thinner) to prevent heart attacks, strokes, and deaths due to blood clots in patients with rare cardiovascular conditions requiring chronic anticoagulation. Tecarfarin has orphan drug and fast-track designations from the United States Food and Drug Administration (the "FDA") for the prevention of systemic thromboembolism (blood clots) of cardiac origin in patients with end-stage kidney disease ("ESKD") and atrial fibrillation ("AFib"). The Company also has orphan drug designation for the prevention of thrombosis and thromboembolism in patients with an implanted mechanical circulatory support device (left ventricular assist devices, right ventricular assist devices, biventricular assist device, total artificial heart (collectively, "VADs")). The Company is also pursuing additional regulatory strategies for unmet needs in anticoagulation therapy for patients with thrombotic antiphospholipid syndrome ("APS").

Basis of Presentation

The accompanying financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP") and applicable rules and regulations of the U.S. Securities and Exchange Commission ("SEC") for the fair presentation of the Company's financial statements for the periods presented. The Company's fiscal year-end is December 31.

The accompanying financial statements of the Company are unaudited. The unaudited interim financial statements have been prepared on the same basis as the audited annual financial statements and, in the opinion of management, reflect all adjustments, which include only normal recurring adjustments, necessary for the fair statement of the Company's financial position as of March 31, 2024, the results of its operations for the three months ended March 31, 2024 and 2023, the statements of stockholders' equity for the three months ended March 31, 2024 and 2023, and its cash flows for the three months ended March 31, 2024 and 2023. The financial data and other information disclosed in these notes related to the three months ended March 31, 2024 and 2023 are also unaudited. The results for the three months ended March 31, 2024 are not necessarily indicative of results to be expected for the year ending December 31, 2024, any other interim periods, or any future year or period. These interim financial statements should be read in conjunction with the audited financial statements as of and for the year ended December 31, 2023, and notes thereto, which are included in the Company's Annual Report on Form 10-K that was filed with the SEC on March 11, 2024.

Liquidity

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern, which contemplates the realization of assets and settlement of liabilities and commitments in the normal course of business. The financial statements do not reflect any adjustments relating to the recoverability and reclassification of assets and liabilities that might be necessary if the Company is unable to continue as a going concern. Since inception, the Company has incurred operating losses, and negative cash flows from operations. For the three months ended March 31, 2024, the Company had a net loss of $1,663,288, which included $163,223 of non-cash expenses. Cash used in operations for the three months ended March 31, 2024 totaled $1,836,380. As of March 31, 2024, the Company had cash and cash equivalents of $ 6,566,418, net working capital of $6,171,714, and an accumulated deficit of $ 16,734,703.

The Company's cash and cash equivalents balance of approximately $ 6.1 million as of May 9, 2024 is expected to be sufficient to fund its operations for at least the next twelve months from the date of the filing of its Quarterly Report on Form 10-Q, however, the Company will require additional funding to complete its planned Phase 3 clinical trial and submit its New Drug Application ("NDA").

Management intends to raise additional funds through partnering and equity and debt financings. However, there can be no assurance that the Company will be able to complete partnering transactions or financings on terms acceptable to the Company or at all. If the Company is unable to raise additional funding to meet its working capital needs in the future, it will be forced to delay or reduce the scope of its research programs and/or limit or cease its operations.

Emerging Growth Company Status

As an "emerging growth company" ("EGC") under the Jumpstart Our Business Startups Act ("JOBS Act"), the Company may elect to take advantage of certain forms of relief from various reporting requirements that are applicable to public companies. The relief afforded under the JOBS Act includes an extended transition period for the implementation of new or revised accounting standards. The Company has elected to take advantage of this extended transition period and, as a result, the Company's financial statements may not be comparable to those of companies that implement accounting standards as of the effective dates for public companies. The Company may take advantage of the relief afforded under the JOBS Act up until the last day of the fiscal year following the fifth anniversary of an offering or such earlier time that it is no longer an EGC.

Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities as of the date of the financial statements and the reported amounts of expenses during the reporting period. Significant estimates and assumptions made in the accompanying financial statements include but are not limited to the fair value of stock-based awards, deferred tax assets and valuation allowance, income tax uncertainties, and certain accruals. The Company evaluates its estimates and assumptions on an ongoing basis using historical experience and other factors and adjusts those estimates and assumptions when facts and circumstances change. Actual results could differ from those estimates.

Concentration of Credit and Other Risks and Uncertainties

Financial instruments, which potentially subject the Company to significant concentrations of credit risk, consist primarily of cash and cash equivalents. Cash is maintained at high credit quality financial institutions and, at times, balances may exceed federally insured limits. All interest-bearing and non-interest-bearing cash balances are insured up to $250,000 at each financial institution. Any loss incurred or a lack of access to such funds could have a significant adverse impact on the Company's financial condition, results of operations, and cash flows.

The Company is subject to a number of risks common for early-stage biopharmaceutical companies including, but not limited to, dependency on the clinical and commercial success of its product candidate, ability to obtain regulatory approval of its product candidate, the need for substantial additional financing to achieve its goals, uncertainty of broad adoption of its approved products, if any, by physicians and patients, significant competition and untested manufacturing capabilities.

Segments

Operating segments are defined as components of an entity for which separate financial information is available and that is regularly reviewed by the Chief Operating Decision Maker ("CODM") in deciding how to allocate resources to an individual segment and in assessing performance. The Company's CODM is its Chief Executive Officer. The Company has determined it operates in a single operating segment and has one reportable segment.

Cash and Cash Equivalents

The Company considers all highly liquid investments purchased with original maturities of three months or less from the purchase date to be cash equivalents. Cash and cash equivalents include cash and money market funds.

Derivative Financial Instruments

The Company evaluates all of its agreements to determine if such instruments have derivatives or contain features that qualify as embedded derivatives. The Company accounted for certain redemption features that were associated with convertible notes as liabilities at fair value and adjusted the instruments to their fair value at the end of each reporting period. Derivative financial liabilities are initially recorded at fair value, with gains and losses arising from changes in the fair value recognized in other (income) expense in the accompanying statements of operations and comprehensive loss for each reporting period while such instruments are outstanding. The embedded derivative liabilities were valued using a probability-weighted expected return model. If the Company repays the noteholders or if, during the next round of financing, the noteholders convert the debt into equity, the derivative financial liabilities are de-recognized and reclassified to stockholders' equity (deficit) on that date. Derivative instrument liabilities are classified in the balance sheet as current or non-current based on whether or not net-cash settlement of the derivative instrument could be required within 12 months of the balance sheet date.

Concurrent with the closing of the initial public offering in January 2023 (the "IPO"), the note holders converted the debt into common stock, accordingly, the derivative financial liabilities were de-recognized and reclassified to stockholders' equity (deficit) on January 24, 2023.

Stock-Based Compensation

The Company measures its stock-based awards granted to employees, consultants, and directors based on the estimated fair values of the awards and recognizes the compensation over the requisite service period. The Company uses the Black-Scholes option-pricing model to estimate the fair value of its stock option awards. Stock-based compensation is recognized using the straight-line method. As the stock compensation expense is based on awards ultimately expected to vest, it is reduced by forfeitures. The Company accounts for forfeitures as they occur.

Deferred Offering Costs

The Company capitalizes certain legal, professional, and other third-party costs that are directly associated with in-process equity financings until such financings are consummated, at which time such costs are recorded against the gross proceeds of the offering. Should an in-process equity financing be abandoned, the deferred offering costs will be expensed immediately as a charge to operating expenses in the statements of operations and comprehensive loss.

Acquisitions

The Company evaluates acquisitions of assets and other similar transactions to assess whether or not the transaction should be accounted for as a business combination or asset acquisition by first applying a screen test to determine whether substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset or group of similar identifiable assets. If so, the transaction is accounted for as an asset acquisition. If not, further determination is required as to whether or not the Company has acquired inputs and processes that have the ability to create outputs, which would meet the definition of a business. Significant judgment is required in the application of the screen test to determine whether an acquisition is a business combination or an acquisition of assets.

Acquisitions meeting the definition of business combinations are accounted for using the acquisition method of accounting, which requires that the purchase price be allocated to the net assets acquired at their respective fair values. In a business combination, any excess of the purchase price over the estimated fair values of the net assets acquired is recorded as goodwill.

For asset acquisitions, a cost accumulation model is used to determine the cost of an asset acquisition. Direct transaction costs are recognized as part of the cost of an asset acquisition. The Company also evaluates which elements of a transaction should be accounted for as a part of an asset acquisition and which should be accounted for separately. The cost of an asset acquisition, including transaction costs, is allocated to identifiable assets acquired and liabilities assumed based on a relative fair value basis. Goodwill is not recognized in an asset acquisition. Any difference between the cost of an asset acquisition and the fair value of the net assets acquired is allocated to the non-monetary identifiable assets based on their relative fair values. When a transaction accounted for as an asset acquisition includes an in-process research and development ("IPR&D") asset, the IPR&D asset is only capitalized if it has an alternative future use other than in a particular research and development project. For an IPR&D asset to have an alternative future use: (a) the Company must reasonably expect that it will use the asset acquired in an alternative manner and anticipate economic benefit from that alternative use, and (b) the Company's use of the asset acquired is not contingent on the further development of the asset subsequent to the acquisition

date (that is, the asset can be used in an alternative manner in the condition in which it existed at the acquisition date). Otherwise, amounts allocated to IPR&D that have no alternative use are expensed to research and development. Asset acquisitions may include contingent consideration arrangements that encompass obligations to make future payments to sellers contingent upon the achievement of future financial targets. Contingent consideration is not recognized until all contingencies are resolved and the consideration is paid or probable of payment, at which point the consideration is allocated to the assets acquired on a relative fair value basis.

Income Taxes

Income taxes are accounted for under the asset and liability method. Under this method, deferred tax assets and liabilities are determined based on the difference between the financial statement and tax bases of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to affect taxable income. Management makes an assessment of the likelihood that the resulting deferred tax assets will be realized. A valuation allowance is provided when it is more likely than not that some portion or all of a deferred tax asset will not be realized. Due to the Company's historical operating performance and net losses, the net deferred tax assets have been fully offset by a valuation allowance.

The Company recognizes uncertain income tax positions at the largest amount that is more likely than not to be sustained upon audit by the relevant taxing authority. An uncertain income tax position will not be recognized if it has less than a 50% likelihood of being sustained. Changes in recognition or measurement are reflected in the period in which judgment occurs. The Company's policy is to recognize interest and penalties related to the underpayment of income taxes as a component of the provision for income taxes.

Net Loss Per Common Share

Basic net loss per common share is calculated by dividing the net loss by the weighted-average number of shares of common stock and pre-funded warrants outstanding for the period, without consideration for potential dilutive shares of common stock. Diluted net loss per common share is computed by dividing net loss by the weighted average number of shares of common stock and common stock equivalents of potentially dilutive securities outstanding for the period determined using the treasury stock or if-converted methods. Since the Company was in a loss position for all periods presented, basic net loss per common share is the same as diluted net loss per common share since the effects of potentially dilutive securities are anti-dilutive. Shares of common stock subject to repurchase are excluded from the weighted-average shares.

Comprehensive Loss

Comprehensive loss is defined as the change in equity during a period from transactions and other events or circumstances from non-owner sources. Net loss and comprehensive loss were the same for the periods presented in the accompanying financial statements.

Research and Development Expenses

Research and development costs are expensed as incurred and consist of fees paid to other entities that conduct certain research and development activities on the Company's behalf. Acquired intangible assets are expensed as research and development costs if, at the time of payment, the technology is under development; is not approved by the FDA or other regulatory agencies for marketing; has not reached technical feasibility; or otherwise has no foreseeable alternative future use. Non-refundable advance payments for goods or services to be received in the future for use in research and development activities are capitalized and then expensed as the related goods are delivered or the services are performed.

On January 19, 2023, the Company issued 600,000 shares of common stock to HESP LLC, pursuant to the terms of an Amendment to the Asset Purchase Agreement, dated August 18, 2022, between the Company and HESP LLC. This payment was determined to be IPR&D with no alternative use. Accordingly, the Company recorded the common stock payment of $3.0 million as research and development expense on January 19, 2023. This payment settled all obligations under the Amendment to the Asset Purchase Agreement.

Patents

Patent costs are comprised primarily of external legal fees, filing fees incurred to file patent applications, and periodic renewal fees to keep the patent in force and are expensed as incurred as a component of general and administrative expenses.

Note 2. Recent Accounting Guidance

Recently Issued Accounting Pronouncements Not Yet Adopted

Accounting standards that have been issued by the Financial Accounting Standards Board ("FASB") or other standards-setting bodies that do not require adoption until a future date are not expected to have a material impact on the Company's financial statements upon adoption.

Note 3. Fair Value Measurements

Assets and liabilities recorded at fair value on a recurring basis in the balance sheet are categorized based upon the level of judgment associated with the inputs used to measure their fair values. Fair value is defined as the exchange price that would be received for an asset or an exit price that would be paid to transfer a liability in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value must maximize the use of observable inputs and minimize the use of unobservable inputs. The authoritative guidance on fair value measurements establishes a three-tier fair value hierarchy for disclosure of fair value measurements as follows:

- Level 1 — Observable inputs such as unadjusted, quoted prices in active markets for identical assets or liabilities at the measurement date.
- Level 2 — Inputs (other than quoted prices included in Level 1) are either directly or indirectly observable for the asset or liability. These include quoted prices for similar assets or liabilities in active markets and quoted prices for identical or similar assets or liabilities in markets that are not active.
- Level 3 — Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

The Company classified its embedded derivative liability as a Level 3 financial instrument and measured and reported its embedded derivatives at fair value. Concurrent with the closing of the initial public offering in January 2023, the note holders converted the debt into common stock, accordingly, the derivative financial liabilities were de-recognized and reclassified to stockholders' equity (deficit) on January 24, 2023.

Financial assets and liabilities subject to fair value measurements on a recurring basis and the level of inputs used in such measurements by major security type are presented in the following table:

	March 31, 2024			
	Level 1	Level 2	Level 3	Fair Value
Financial Assets:				
Money market funds	$ 6,488,507	$ -	$ -	$ 6,488,507
Total financial liabilities	$ 6,488,507	$ -	$ -	$ 6,488,507

	December 31, 2023			
	Level 1	Level 2	Level 3	Fair Value
Financial Assets:				
Money market funds	$ 8,287,843	$ -	$ -	$ 8,287,843
Total financial liabilities	$ 8,287,843	$ -	$ -	$ 8,287,843

The following table summarizes the changes in the fair value of the derivative liabilities measured at fair value on a recurring basis using significant unobservable inputs (Level 3)

	Derivative Liabilities
Balance at December 31, 2022	$ 4,379,944
Change in fair value	216,095
De-recognition of derivative liabilities	(4,596,039)
Balance at December 31, 2023	$ -

The carrying amounts of cash and cash equivalents, prepaid expenses, deferred offering costs, accounts payable, and accrued liabilities approximate their fair values due to their short-term nature. There were no transfers of liabilities among the fair value measurement categories during any of the periods presented.

Note 4. Accrued Liabilities

Accrued liabilities consist of the following:

	March 31, 2024	December 31, 2023
Accrued consulting fees	$ 79,881	$ 4,000
Accrued compensation	209,901	596,131
Other	150,993	38,075
Total accrued liabilities	$ 440,775	$ 638,206

Note 5. Leases, Commitments, and Contingencies

Leases

At lease inception, the Company determines if an arrangement is an operating or capital lease. For operating leases, the Company recognized rent expense, inclusive of rent escalation, on a straight-line basis over the lease term.

In accordance with ASC 842, Leases, the Company determines if an arrangement is or contains a lease at inception. A contract is or contains a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. The Company classifies leases at the lease commencement date as operating or finance leases and records a right-of-use asset and a lease liability on the balance sheet for all leases with an initial lease term of greater than 12 months. Leases with an initial term of 12 months or less are not recorded in the balance sheet, but payments are recognized as expenses on a straight-line basis over the lease term. The Company has elected not to recognize leases with terms of 12 months or less.

A lease qualifies as a finance lease if any of the following criteria are met at the inception of the lease: (i) there is a transfer of ownership of the leased asset to the Company by the end of the lease term, (ii) the Company holds an option to purchase the leased asset that it is reasonably certain to exercise, (iii) the lease term is for a major part of the remaining economic life of the leased asset, (iv) the present value of the sum of lease payments equals or exceeds substantially all of the fair value of the leased asset, or (v) the nature of the leased asset is specialized to the point that it is expected to provide the lessor no alternative use at the end of the lease term. All other leases are recorded as operating leases.

The Company enters into contracts that contain both lease and non-lease components. Non-lease components may include maintenance, utilities, and other operating costs. The Company combines the lease and non-lease components of fixed costs in its lease arrangements as a single lease component. Variable costs, such as utilities or maintenance costs, are not included in the measurement of right-of-use assets and lease liabilities but rather are expensed when the event determining the amount of variable consideration to be paid occurs.

Finance and operating lease assets and liabilities are recognized at the lease commencement date based on the present value of the lease payments over the lease term using the discount rate implicit in the lease. If the rate implicit is not readily determinable, the Company utilizes an estimate of its incremental borrowing rate based upon the available information at the lease commencement date. Operating lease assets are further adjusted for prepaid or accrued lease payments. Operating lease payments are expensed using the straight-line method as an operating expense over the lease term.

The Company's operating lease ROU assets and liabilities as of March 31, 2024 and December 31, 2023 are as follows:

	March 31, 2024	December 31, 2023
Assets		
Right of use assets	$ 14,920	$ 20,998
Liabilities		
Current		
Operating lease liabilities	$ 15,167	$ 21,350
Total operating lease liabilities	$ 15,167	$ 21,350

Operating lease expenses were $6,555 and $6,636 for the three months ended March 31, 2024 and 2023, respectively. Cash paid for amounts included in the measurement of operating lease liabilities included in operating cash flows was $6,696 and $6,501 for the three months ended March 31, 2024 and 2023, respectively. The remaining operating lease term was 7 months, and the operating lease discount rate was 12% as of March 31, 2024.

Future annual lease payments under non-cancellable operating leases as of March 31, 2024 were as follows:

2024	$ 15,623
Total lease payments	15,623
Less: Imputed interest	456
Total operating lease liabilities	$ 15,167

Contingencies

In the normal course of business, the Company enters into contracts and agreements that contain a variety of representations and warranties and provide for general indemnifications. The Company's exposure under these agreements is unknown, because it involves claims that may be made against the Company in the future, but have not yet been made. The Company accrues a liability for such matters when it is probable that future expenditures will be made and such expenditures can be reasonably estimated.

Indemnification

In accordance with the Company's certificate of incorporation and bylaws, the Company indemnifies its officers and directors for certain events or occurrences, subject to certain limits, while they are serving in such capacity. In addition, the Company has entered into indemnification agreements with its officers and directors. There have been no claims to date, and the Company has a directors and officers liability insurance policy that may enable it to recover a portion of any amounts paid for future claims.

Note 6. Stockholders' Equity and Warrants

Common Stock

The Company is authorized to issue a total of 75,000,000 shares of common stock with a par value of $ 0.001 per share and 7,500,000 shares of preferred stock, par value $0.001 per share.

Holders of common stock are entitled to one vote for each share of common stock held of record for the election of the Company's directors and all other matters requiring stockholder action. Holders of common stock will be entitled to receive such dividends, if any, as may be declared from time to time by the Company's Board in its discretion out of funds legally available therefor.

On January 24, 2023, the Company consummated its IPO of 1,400,000 shares of its common stock at a public offering price of $ 5.00 per share, generating gross proceeds of $7,000,000 and net proceeds of $5,408,575. The Company's shares of common stock commenced trading on the Nasdaq Capital Market on January 20, 2023, under the symbol "CVKD."

In connection with the IPO, on January 19, 2023, the Company entered into an underwriting agreement (the "Underwriting Agreement") with Boustead, as representative of the underwriters (the "Representative"). Pursuant to the Underwriting Agreement, the Company agreed to issue to the underwriters a five-year warrant (the "Representative's Warrant") to purchase an aggregate of 84,000 shares of the Company's common stock, which is equal to six percent (6%) of the shares of common stock sold in the IPO. The Representative's Warrant has an exercise price of $ 6.00, which was equal to 120% of the public offering price of the common stock in the IPO.

On July 12, 2023, the Company entered into a securities purchase agreement with an institutional investor (the "Investor Selling Stockholder") pursuant to which the Company sold to the Investor Selling Stockholder in a private placement (the "Private Placement") (i) an aggregate of 1,300,000 shares of common stock (the "Shares"), (ii) in lieu of additional Shares, pre-funded warrants to purchase up to an aggregate of 2,985,715 shares of Common Stock (the "Pre-Funded Warrants"), and (iii) accompanying Common Warrants to purchase up to an aggregate of 4,285,715 shares of common stock (the "Common Warrants"). The combined purchase price of each Share and accompanying Common Warrants was $1.75. The combined purchase price of each Pre-Funded Warrant and accompanying Common Warrants was $1.7499.

The Private Placement closed on July 14, 2023. The Company received aggregate gross proceeds from the Private Placement of approximately $ 7.5 million before deducting the placement agent commissions and offering expenses payable by the Company. H.C. Wainwright & Co., LLC ("H.C.W.") acted as the placement agent in the Private Placement and as part of its compensation the Company issued to designees of H.C.W. Placement Agent Warrants to purchase up to 278,571 shares of common stock at an exercise price of $ 2.1875.

Each Pre-Funded Warrant has an exercise price equal to $ 0.0001 per share. The Pre-Funded Warrants are exercisable at any time after their original issuance and will not expire until exercised in full. Each Common Warrant has an exercise price equal to $1.75 per share. The Common Warrants are exercisable at any time after their original issuance and will expire on January 16, 2029. The exercise price and number of shares of common stock issuable upon exercise of the Common Warrant and Pre-Funded Warrant are subject to appropriate adjustment in the event of stock dividends, stock splits, reorganizations or similar events.

During the three months ended March 31, 2024, the Company received notice to exercise all of the 2,985,715 Pre-Funded Warrants. As a result of the respective Pre-Funded Warrant exercises, the Company issued 2,985,715 shares of common stock. As of March 31, 2024, there are no Pre-Funded Warrants outstanding.

The Common Warrants issued in the Private Placement provide that the holder thereof has the right to participate in distributions or dividends paid on the Company's shares of common stock on an as-converted basis. They also provide that a holder of Common Warrants, as applicable, will not have the right to exercise any portion of its Common Warrants if such holder, together with its affiliates, and any other party whose holdings would be aggregated with those of the holder for purposes of Section 13(d) or Section 16 of the Exchange Act would beneficially own in excess of 4.99% for the Common Warrants of the number of shares of Common Stock outstanding immediately after giving effect to such exercise (the "Beneficial Ownership Limitation"); provided, however, that the holder may increase or decrease the Beneficial Ownership Limitation by giving notice to the Company, with any such increase not taking effect until the sixty-first day after such notice is delivered to the Company but not to any percentage in excess of 9.99%. The Common Warrants may be exercised on a cashless basis if a registration statement registering the shares of common stock underlying the Common Warrants is not effective.

Warrant Summary

The following table summarizes the total warrants outstanding at March 31, 2024:

	Issue Date	Exercise Price Per Share	Expiration Date	Outstanding as of December 31, 2023	New Issuance	Exercised	Outstanding as of March 31, 2024
Placement agent warrants	July - Sept 2022	$ 3.00	July - Sept 2027	11,500	-	-	11,500
Placement agent warrants	Nov 2022	$ 1.00	Nov 2027	15,000	-	-	15,000
Representative warrants	Jan 2023	$ 6.00	Jan 2028	84,000	-	-	84,000
Pre-funded investor warrants	July 2023	$ 0.0001	Once exercised	2,985,715	-	(2,985,715)	-
Common warrants	July 2023	$ 1.75	Jan 2029	4,285,715	-	-	4,285,715
Placement agent warrants	July 2023	$ 2.1875	Jan 2029	278,571	-	-	278,571
				7,660,501	-	(2,985,715)	4,674,786

Note 7. Equity-Based Compensation

The Company adopted the Cadrenal Therapeutics, Inc. 2022 Equity Incentive Plan (the "Initial Plan"), on July 11, 2022, which was later amended and restated on October 16, 2022, for purposes of clarifying the application of certain of the rules of the Initial Plan to awards approved before such amendment and restatement of the Initial Plan and to facilitate the transition to the Cadrenal Therapeutics, Inc. 2022 Successor Equity Incentive Plan (the "Successor Plan") for the issuance and approval of awards after consummation of the IPO. On October 16, 2022, the Board adopted and the Company's stockholders approved the Cadrenal Therapeutics, Inc. 2022 Successor Equity Incentive Plan (the "2022 Plan"), which is a successor to and continuation of the Initial Plan and became effective on January 19, 2023. Upon the effectiveness of the 2022 Plan, it replaced the Initial Plan, except with respect to awards outstanding under the Initial Plan, and no further awards will be available for grant under the Initial Plan.

Subject to certain adjustments, the maximum number of shares of common stock that could have been issued under the Initial Plan and 2022 Plan was initially 2,000,000 shares. The maximum number of shares of common stock that may be issued under the 2022 Plan will automatically increase on January 1 of each calendar year for a period of ten years commencing on January 1, 2024 and ending on (and including) January 1, 2033, to a number of shares of common stock equal to 20% of the total number of shares of common stock outstanding on December 31 of the preceding calendar year; provided, however that the board of directors, or the compensation committee, may act prior to January 1 of a given calendar year to provide that the increase for such year will be a lesser number of shares of common stock. On January 1, 2024, the maximum number of shares of common stock that may be issued under the 2022 Plan increased to 2,604,550, of which 269,550 remained available for future issuance as of March 31, 2024. All available shares may be utilized toward the grant of any type of award under the 2022 Plan.

The Company measures its stock-based awards granted to employees, consultants and directors based on the estimated fair values of the awards and recognizes the compensation over the requisite service period. The Company uses the Black-Scholes option-pricing model to estimate the fair value of its stock option awards. Stock-based compensation is recognized using the straight-line method. As the stock compensation expense is based on awards ultimately expected to vest, it is reduced by forfeitures. The Company accounts for forfeitures as they occur.

Weighted average assumptions used in the Black-Scholes model are set forth below:

	Three Months Ended March 31, 2024
Risk-free interest rate	4.09% - 4.83%
Dividend yield	-
Expected term (years)	5.27 - 5.31
Volatility	76.4% - 77.7%

Activity under the Plans for the period from December 31, 2023 to March 31, 2024 is set forth below:

	Number Outstanding	Weighted-Average Exercise Price Per Share	Weighted-Average Remaining Contractual Life (Years)	Aggregate Intrinsic Value
Outstanding at December 31, 2023	1,175,000	$ 0.86	8.64	$ 105,000
Granted	1,020,000	0.94	9.80	-
Exercised	-	-	-	-
Canceled/forfeited/expired	-	-	-	-
Outstanding at March 31, 2024	2,195,000	$ 0.90	9.04	$ -

Options vested and exercisable at March 31, 2024	713,058	$ 0.80	8.43	$ -
Options vested and expected to vest as of March 31, 2024	2,195,000	$ 0.90	9.04	$ -

The weighted average grant date fair value of options granted to date was $ 0.87. At March 31, 2024, the Company had $ 1,151,708 of unrecognized stock-based compensation expense related to stock options which will be recognized over the weighted average remaining requisite service period of 2.0 years. The Company settles employee stock option exercises with newly issued shares of common stock.

Total stock-based compensation expense and the allocation of stock-based compensation for the periods presented below were as follows:

	Three Months Ended March 31,	
	2024	2023
General and administrative	$ 67,029	$ 194,140
Research and development	95,702	92,256
Total stock-based compensation	$ 162,731	$ 286,396

Note 8. Net Loss Per Common Share

The following table sets forth the computation of the basic and diluted net loss per common share:

	Three Months Ended March 31,	
	2024	2023
Numerator:		
Net loss	$ (1,663,288)	$ (5,173,574)
Denominator:		
Weighted average common shares outstanding	16,008,469	10,772,493
Net loss per share, basic and diluted	$ (0.10)	$ (0.48)

Since the Company was in a loss position for the periods presented, basic net loss per share is the same as diluted net loss per share as the inclusion of all potential dilutive securities would have been anti-dilutive. For the periods presented, there were no potential dilutive securities other than convertible notes, stock options, and warrants.

The following common stock equivalents were excluded from the calculation of diluted net loss per share applicable to common stockholders for the periods indicated because including them would have had an anti-dilutive effect:

	As of March 31,	
	2024	2023
Anti-dilutive common stock equivalents:		
Stock options to purchase common stock	2,195,000	1,100,000
Warrants to purchase common stock	4,674,786	276,500
Total anti-dilutive common stock equivalents	6,869,786	1,376,500

Note 9. Subsequent Events

The Company has evaluated events that occurred through May 9, 2024, the date that the financial statements were issued, and determined that there have been no events that have occurred that would require adjustments to the Company's disclosures in the financial statements.

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

You should read the following management's discussion and analysis of our financial condition and results of operations in conjunction with our unaudited financial statements and notes thereto included in Part I, Item 1 of this Quarterly Report on Form 10-Q and with our audited financial statements and notes thereto for the year ended December 31, 2023, included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2023 filed on March 11, 2024 (the "Annual Report") with the U.S. Securities and Exchange Commission (the "SEC"). This discussion, particularly information with respect to our future results of operations or financial condition, business strategy, plans and objectives for future operations, includes forward-looking statements that involve risks and uncertainties as described under the heading "Special note regarding forward-looking statements" in this Quarterly Report on Form 10-Q. You should review the disclosure under Part 1, Item 1A of the Annual Report for a discussion of important factors that could cause our actual results to differ materially from those anticipated in these forward-looking statements. References in this Quarterly Report on Form 10-Q to "we," "us," "our" and similar first-person expressions refer to Cadrenal Therapeutics, Inc. ("Cadrenal").

Special Note Regarding Forward-Looking Statements

This Quarterly Report on Form 10-Q contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those discussed in the forward-looking statements. The statements contained in this report that are not purely historical are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act") and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Forward-looking statements are often identified by the use of words such as, but not limited to, "anticipate," "believe," "can," "continue," "could," "estimate," "expect," "intend," "may," "plan," "project," "seek," "should," "strategy," "target," "will," "would" and similar expressions or variations intended to identify forward-looking statements. These statements are based on the beliefs and assumptions of our management based on information currently available to management. Such forward-looking statements are subject to risks, uncertainties and other important factors that could cause actual results and the timing of certain events to differ materially from future results expressed or implied by such forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those identified under Part 1, Item 1A of the Annual Report. Furthermore, such forward-looking statements speak only as of the date of this report. Except as required by law, we undertake no obligation to update any forward-looking statements to reflect events or circumstances after the date of such statements.

Company Overview

We are developing tecarfarin, a late-stage novel oral and reversible anticoagulant (blood thinner), to prevent heart attacks, strokes, and deaths due to blood clots in patients with certain rare medical conditions requiring chronic anticoagulation. Tecarfarin has orphan drug and Fast Track designations from the United States Food and Drug Administration (the "FDA") for the prevention of systemic thromboembolism (blood clots) of cardiac origin in patients with ESKD and AFib. and just recently received orphan drug designation for the prevention of thrombosis and thromboembolism in patients with an implanted mechanical circulatory support device (left ventricular assist devices, right ventricular assist devices, biventricular assist device, total artificial heart (collectively, "VADs")) in April 2024. We are also pursuing additional regulatory strategies for unmet needs in anticoagulation therapy for patients with thrombotic antiphospholipid syndrome ("APS"). These patients have historically been treated with warfarin, which has been shown to be challenging and unreliable. The direct oral anticoagulants, which are an alternative to warfarin for certain indications, are contraindicated for VADs patients and have been associated with an increased risk for recurrent thrombosis in patients with APS.

Tecarfarin is specifically designed to target a different metabolism pathway than the most commonly prescribed drugs used in the treatment of thrombosis and AFib. Tecarfarin has been evaluated in eleven (11) human clinical trials in over 1,000 individuals (269 patients were treated for at least six months and 129 patients were treated for one year or more). In Phase 1, Phase 2 and Phase 2/3 clinical trials, tecarfarin has generally been well-tolerated in both healthy adult subjects and patients with chronic kidney disease ("CKD"). In the Phase 2/3 trial, EMBRACE-AC, the largest tecarfarin trial with 607 patients having completed it, only 1.6% of the blinded tecarfarin subjects suffered from major bleeding and there were no thrombotic events.

Tecarfarin was developed by researchers using a small molecule "retrometabolic" drug design process which targets a different metabolic pathway than the most commonly prescribed drugs for the treatment of thrombosis and AFib. "Drug metabolism" refers to the process by which a drug is inactivated by the body and rendered easier to eliminate or to be cleared by the body. Most approved drugs, including warfarin, the only FDA-approved Vitamin K antagonist ("VKA"), which is a prescribed drug for the treatment of thrombosis, are metabolized in the liver through a pathway known as the Cytochrome CYP450 system, or CYP450, by the enzymes known as CYP2C9 and CYP3A4. By using a different metabolic pathway, tecarfarin eliminates or minimizes the CYP450 metabolism in the liver. Patients taking multiple medications that interact with CYP2C9, or CYP3A4 or those with impaired kidney function, can experience an overload in the pathway, creating a bottleneck that often leads to insufficient clearance, which results in a toxic build-up of one or more drugs. In some instances, patients taking multiple medications metabolized by the same CYP450 pathway may experience decreased efficacy of one or more of the medications due to rapid metabolism or increased drug effect and/or toxicity due to enzyme induction. Patient-specific genetic differences can also hinder drug clearance in the CYP450 pathway. Our product candidate tecarfarin was designed to follow a metabolic pathway distinct from the CYP450 pathway and is metabolized by both CYP450 and non-CYP450 pathways. We believe this may allow elimination by large capacity and non-saturable tissue esterase pathways that exist throughout the body rather than just in the liver.

Tecarfarin is an orphan designated, vitamin K antagonist, oral, once-daily and reversible anticoagulant in the same drug class as warfarin designed for use in patients requiring chronic VKA anticoagulation, to prevent pathologic thrombus/thromboembolism in certain medical conditions that are not well served by currently available VKAs and in which DOACS are contraindicated or not effective.

The prevailing treatment for thrombosis is with an oral anticoagulant, either a VKA, like warfarin, or non-vitamin K oral anticoagulant ("DOAC"). VKAs block the production of vitamin K-dependent blood clotting factors, such that the blood is "thinned," preventing clots, while DOACs directly block the activity of certain of these clotting factors. Tecarfarin, like warfarin, is a VKA.

Initial Public Offering

On January 24, 2023, we consummated our initial public offering (the "IPO") of 1,400,000 shares of our common stock, par value $0.001 per share (the "common stock") at a public offering price of $5.00 per share, generating gross proceeds of $7,000,000. Our shares of common stock commenced trading on the Nasdaq on January 20, 2023 under the symbol "CVKD."

Private Placement

On July 12, 2023, we entered into a securities purchase agreement (the "Purchase Agreement") with an institutional investor (the "Investor") pursuant to which we sold to the Investor in a private placement priced at-the-market (the "Private Placement") consistent with the rules of the Nasdaq), (i) an aggregate of 1,300,000 shares of common stock, (ii) in lieu of additional share of common stock, pre-funded warrants (the "Pre-Funded Warrants") to purchase up to an aggregate of 2,985,715 shares of common stock, and (iii) accompanying common warrants (the "Common Warrants") to purchase up to an aggregate of 4,285,715 shares of common stock. The combined purchase price of each share and accompanying Common Warrants was $1.75. The combined purchase price of each Pre-Funded Warrant and accompanying Common Warrants was $1.7499.

The Private Placement closed on July 14, 2023. We received aggregate gross proceeds from the Private Placement of approximately $7.5 million before deducting the placement agent commissions and estimated offering expenses payable by us. We intend to use the net proceeds from the Private Placement for working capital purposes. H.C. Wainwright & Co., LLC ("H.C.W.") acted as the placement agent in the Private Placement, and as part of its compensation, we issued to designees of H.C.W. Placement Agent Warrants to purchase up to 278,571 shares of common stock.

Results of Operations

The following table summarizes our results of operations for the three months ended March 31, 2024 and March 31, 2023.

	Three Months Ended March 31,	
	2024	**2023**
Operating expenses:		
General and administrative expenses	$ 1,125,993	$ 964,732
Research and development expenses	629,025	3,235,317
Depreciation expense	597	190
Total operating expenses	1,755,615	4,200,239
Loss from operations	(1,755,615)	(4,200,239)
Other (income) expense:		
Interest and dividend income	(92,327)	-
Interest expense	-	3,534
Interest expense, amortization of debt discount	-	13,567
Change in fair value of derivative liabilities	-	216,095
Loss on extinguishment of debt	-	740,139
Total other (income) expense	(92,327)	973,335
Net loss and comprehensive loss	$ (1,663,288)	$ (5,173,574)

General and administrative expenses

General and administrative expenses were $1,125,993 for the three months ended March 31, 2024 compared to $964,732 for the three months ended March 31, 2023. The $161,261, or 17%, increase can be attributed to a $115,977 increase in personnel-related expenses as we added a Chief Operating Officer in January 2024, a $105,376 increase in public company expenses, and a $41,175 increase in consulting fees. These increases were partially offset by a $127,110 decrease in stock-based compensation due to the timing of vesting.

Research and development expenses

Research and development expenses were $629,025 for the three months ended March 31, 2024 compared to $3,235,317 for the three months ended March 31, 2023. The $2,606,292, or 81%, decrease can be primarily attributed to the issuance of 600,000 shares of common stock (valued at $3.0 million) in January 2023 to HESP LLC, pursuant to the terms of an Amendment to the Asset Purchase Agreement. This decrease was partially offset by a $48,568 increase in personnel-related expenses, a $165,077 increase in consulting fees, and a $129,263 increase in expenses associated with chemistry, manufacturing and controls ("CMC").

Interest and dividend income

Interest and dividend income was $92,327 for the three months ended March 31, 2024. This represents the interest and dividend income earned from our investments in money market funds from the proceeds of our IPO and July 2023 PIPE financing. We did not earn interest or dividend income during the three months ended March 31, 2023.

Change in fair value of derivative liabilities

Concurrent with the closing of the IPO in January 2023, the note holders converted the debt into common stock, accordingly, the derivative financial liabilities were de-recognized and reclassified to stockholders' equity (deficit) on January 24, 2023.

The derivative liabilities were considered a level 3 fair value financial instrument and were remeasured up to January 24, 2023 which was the date of derecognition. We recorded a non-cash charge of $216,095 in January 2023. This charge represented the increase in the fair value of the derivative liabilities since the previous measurement date of December 31, 2022. We did not have such activity during the three months ended March 31, 2024.

Loss on extinguishment of debt

We recorded a $740,139 loss on the extinguishment of debt during the three months ended March 31, 2023. This loss represented the unamortized debt discount associated with the convertible notes and the November promissory notes, which were settled concurrent with the IPO. We did not have such activity during the three months ended March 31, 2024.

Liquidity and Capital Resources

Since inception, we have incurred losses and negative cash flows from operations. To date, we have funded our operations from the proceeds of the sale of convertible notes, and the nonconvertible notes and warrants issued in November 2022, as well as our IPO completed in January 2023 and our Private Placement consummated in July 2023. We had a net loss of $1,663,288 for the three months ended March 31, 2024 which included $163,223 of non-cash expenses. Cash used in operating activities for the three months ended March 31, 2024 totaled $1,836,380. As of March 31, 2024, we had cash and cash equivalents of approximately $6.6 million and no debt. Our current cash and cash equivalents balance as of May 9, 2024 of approximately $6.1 million, is sufficient to fund our operations for at least the next twelve months; however, we expect to require additional funding to complete our planned Phase 3 clinical trial and submit our New Drug Application ("NDA"). In order to fund the commencement and completion of our Phase 3 clinical trial, we intend to raise additional funds through equity and debt financings as well as potential partnering relationships. However, there can be no assurance that we will be able to complete any additional financings or partnering relationships on terms acceptable to us or at all. If we are unable to raise additional funding to meet our working capital needs in the future, we will be forced to delay or reduce the scope of our research programs and/or limit or cease our operations.

Cash Flows

The following table summarizes our cash flows for the periods presented:

	Three Months Ended March 31,	
	2024	**2023**
Cash used in operating activities	$ (1,836,380)	$ (1,412,794)
Cash provided by financing activities	298	5,408,575
Net change in cash	(1,836,082)	3,995,781
Cash, beginning of period	8,402,500	32,586
Cash, end of period	$ 6,566,418	$ 4,028,367

Operating activities

During the three months ended March 31, 2024, cash used in operating activities was $1,836,380. Net loss adjusted for the non-cash items as detailed on the statement of cash flows, used $1,500,065 in cash, and the changes in operating assets and liabilities, as detailed on the statement of cash flows, used $336,315 in cash primarily from a $197,431 decrease in accrued liabilities partially, a $204,094 increase in prepaid expenses, and a $167,844 increase in deferred offering costs partially offset by a $233,054 increase in accounts payable.

During the three months ended March 31, 2023, cash used in operating activities was $1,412,794. Net loss adjusted for the non-cash items as detailed on the statement of cash flows, used $917,099 in cash, and the changes in operating assets and liabilities, as detailed on the statement of cash flows, used $495,695 in cash primarily from a $285,330 decrease in accounts payable and a $604,945 decrease in accrued liabilities partially offset by a $672,295 decrease in deferred equity offering costs.

Financing activities

During the three months ended March 31, 2024, net cash provided by financing activities totaled $298 from the exercise of Pre-Funded Warrants.

During the three months ended March 31, 2023, net cash provided by financing activities totaled $5,408,575 as we completed our IPO of 1,400,000 shares of our common stock at a public offering price of $5.00 per share, generating gross proceeds of $7,000,000 and net proceeds of $5,408,575. We also received $250,000 from the exercise of warrants that we issued in November 2022, which proceeds were used to repay the notes that were issued in November 2022, with accrued interest on the notes being paid in cash.

Critical Accounting Estimates

This discussion and analysis of our financial condition and results of operations is based on our financial statements, which have been prepared in accordance with generally accepted accounting principles in the United States, or GAAP. The preparation of these financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements, as well as the reported expenses incurred during the reporting periods. Significant estimates and assumptions made in the accompanying financial statements include but are not limited to the fair value of financial instruments, the fair value of stock-based awards, deferred tax assets and valuation allowance, income tax uncertainties, and certain accruals. Our estimates are based on our historical experience and on various other factors that we believe are reasonable under the circumstances, that results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimated under different assumption or conditions.

Derivative Financial Instruments

We evaluate all of our agreements to determine if such instruments have derivatives or contain features that qualify as embedded derivatives. We account for certain redemption features that are associated with convertible notes as liabilities at fair value and adjust the instruments to their fair value at the end of each reporting period. Derivative financial liabilities are initially recorded at fair value, with gains and losses arising from changes in the fair value recognized in other income (expense) in the accompanying statements of operations and comprehensive loss for each reporting period while such instruments are outstanding. The embedded derivative liability is valued using a probability-weighted expected return model. If we repay the note holders or if, during the next round of financing, the note holders convert the debt into equity, the derivative financial liability will be de-recognized on that date. Derivative instrument liabilities are classified in the balance sheet as current or non-current based on whether or not net-cash settlement of the derivative instrument could be required within 12 months of the balance sheet date.

Stock-Based Compensation

We measure our stock-based awards granted to employees, consultants and directors based on the estimated fair values of the awards and recognize the compensation over the requisite service period. We use the Black-Scholes option-pricing model to estimate the fair value of our stock option awards. Stock-based compensation is recognized using the straight-line method. As the stock compensation expense is based on awards ultimately expected to vest, it is reduced by forfeitures. We account for forfeitures as they occur.

OFF-BALANCE SHEET ARRANGEMENTS

We did not have during the period presented, and we do not currently have, any off-balance sheet arrangements, as defined under SEC rules.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

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

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures as of March 31, 2024. The term “disclosure controls and procedures,” as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC’s rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the Company’s management, including its principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure. We have adopted and maintain disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) that are designed to provide reasonable assurance that information required to be disclosed in the reports filed under the Exchange Act, such as this Quarterly Report on Form 10-Q, is collected, recorded, processed, summarized, and reported within the time periods specified in the rules of the SEC. Our disclosure controls and procedures are also designed to ensure that such information is accumulated and communicated to management to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives, and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation of our disclosure controls and procedures as of March 31, 2024, our Chief Executive Officer and Chief Financial Officer concluded that, as of such a date, our disclosure controls and procedures were effective at the reasonable assurance level.

Changes in Internal Control over Financial Reporting

During the quarter ended March 31, 2024, there were no changes in our internal control over financial reporting (as defined in Rules 13a 15(f) and 15d 15(f) of the Exchange Act) that occurred that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II: OTHER INFORMATION

Item 1. Legal Proceedings

We are not currently subject to any material legal proceedings.

Item 1A. Risk Factors

Investing in our securities involves a high degree of risk. Please refer to Part I, Item 1A, "Risk Factors," contained in our Annual Report for a description of certain significant risks and uncertainties to which our business, financial condition and results of operations are subject. There have been no material changes from these risk factors as of the date of filing of this Quarterly Report on Form 10-Q.

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

(a) Unregistered Sales of Equity Securities

We did not sell any equity securities during the quarter ended March 31, 2024 in transactions that were not registered under the Securities Act other than as previously disclosed in our filings with the SEC.

(b) Use of Proceeds

Not applicable.

(c) Issuer Purchases of Equity Securities

Not applicable.

Item 3. Defaults Upon Senior Securities.

Not applicable.

Item 4. Mine Safety Disclosures.

Not applicable.

Item 5. Other Information.

During the three months ended March 31, 2024, no director or officer of the Company adopted or terminated a "Rule 10b5-1 trading arrangement" or "nonRule 10b5-1 trading arrangement," as each term is defined in Item 408(a) of Regulation S-K.

Item 6. Exhibits.

The exhibits filed or furnished as part of this Quarterly Report on Form 10-Q are set forth on the Exhibit Index, which Exhibit Index is incorporated herein by reference.

Exhibit No.	Description
1.1	At the Market Offering Agreement by and between Cadrenal Therapeutics, Inc. and H.C. Wainwright & Co., LLC (Incorporated by reference as Exhibit 1.1 to the Current Report on Form 8-K filed on March 12, 2024)
3.1	Amended and Restated Certificate of Incorporation (Incorporated by reference as Exhibit 3.1 to the Registration Statement on Form S-1 (File No. 333-267562) filed on September 22, 2022)
3.2	Amended and Restated Bylaws (Incorporated by reference as Exhibit 3.2 to the Registration Statement on Form S-1 (File No. 333-267562) filed on September 22, 2022)
10.1#	Offer Letter dated, February 6, 2024, between Cadrenal Therapeutics, Inc. and Jeffrey Cole (Incorporated by reference as Exhibit 10.1 to the Current Report on Form 8-K filed on February 12, 2024)
10.2#	Employment Agreement, effective as of February 8, 2024, between Cadrenal Therapeutics, Inc. and Jeffrey Cole (Incorporated by reference as Exhibit 10.2 to the Current Report on Form 8-K filed on February 12, 2024)
31.1*	Certification of the Principal Executive Officer Pursuant to Rule 13a-14 and 15d-14 of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2*	Certification of the Principal Financial Officer and Principal Accounting Officer Pursuant to Rule 13a-14 and 15d-14 of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1*	Certification by the Principal Executive Officer Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2*	Certification by the Principal Financial Officer and Principal Accounting Officer Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101.INS	Inline XBRL Instance*
101.SCH	Inline XBRL Taxonomy Extension Schema*
101.CAL	Inline XBRL Taxonomy Extension Calculation*
101.DEF	Inline XBRL Taxonomy Extension Definition*
101.LAB	Inline XBRL Taxonomy Extension Labeled*
101.PRE	Inline XBRL Taxonomy Extension Presentation*
104	Cover Page Interactive Data File (the cover page XBRL tags are embedded within the inline XBRL document)

* Filed herewith.
\# Management contract or compensatory plan or arrangement required to be identified pursuant to Item 15(a)(3) of this Quarterly Report on Form 10-Q.

SIGNATURES

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

CADRENAL THERAPEUTICS, INC.
(Registrant)

Date: May 9, 2024

By: /s/ Quang Pham
Quang Pham
Chief Executive Officer
(Principal Executive Officer)

CADRENAL THERAPEUTICS, INC.
(Registrant)

Date: May 9, 2024

By: /s/ Matthew Szot
Matthew Szot
Chief Financial Officer
(Principal Financial Officer and
Principal Accounting Officer)

Exhibit 31.1

Certification of Chief Executive Officer
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Quang Pham, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Cadrenal Therapeutics, Inc.

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

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

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

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

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

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

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

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

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

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

Date: May 9, 2024

By: /s/ Quang Pham
Name: Quang Pham
Title: Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

Certification of Chief Financial Officer
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Matthew Szot, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Cadrenal Therapeutics, Inc.

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

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

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

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

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

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

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

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

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

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

Date: May 9, 2024

By: /s/ Matthew Szot
Name: Matthew Szot
Title: Chief Financial Officer
(Principal Financial Officer and
Principal Accounting Officer)

Exhibit 32.1

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

I, Quang Pham, Chief Executive Officer (Principal Executive Officer) of Cadrenal Therapeutics, Inc. (the "Company"), do 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 the best of my knowledge:

1. The Company's Quarterly Report on Form 10-Q for the period ended March 31, 2024 (the "Form 10-Q") fully complies with the requirements of Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934, as amended; and

2. The information contained in the Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of the Company for the periods presented.

Dated: May 9, 2024

By: /s/ Quang Pham
Name: Quang Pham
Title: Chief Executive Officer
(Principal Executive Officer)

Exhibit 32.2

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

I, Matthew Szot, Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer) of Cadrenal Therapeutics, Inc. (the "Company"), do 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 the best of my knowledge:

1. The Company's Quarterly Report on Form 10-Q for the period ended March 31, 2024 (the "Form 10-Q") fully complies with the requirements of Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934, as amended; and

2. The information contained in the Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of the Company for the periods presented.

Dated: May 9, 2024

By: /s/ Matthew Szot
Name: Matthew Szot
Title: Chief Financial Officer
(Principal Financial Officer and
Principal Accounting Officer)