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 September 30, 2023

or

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

For the transition period from _______ to _______

Commission file number: 001-40932

CYNGN INC.
(Exact name of registrant as specified in its charter)

Delaware	**46-2007094**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

1015 O'Brien Dr.
Menlo Park, CA 94025
(Address of principal executive offices) (Zip Code)

(650) 924-5905
(Registrant's telephone number, including area code)

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common stock, $0.00001	CYN	Nasdaq Stock Market LLC

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

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

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

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

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

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

As of November 8, 2023, the issuer had 41,802,944 shares of common stock, par value $0.00001 per share, outstanding.

CYNGN INC.

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PART 1 — FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

CYNGN INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS

	(Unaudited) September 30, 2023	December 31, 2022
Assets		
Current assets		
Cash	$ 3,536,381	$ 10,536,273
Restricted cash	-	50,000
Short-term investments	4,619,260	12,064,337
Prepaid expenses and other current assets	436,923	1,126,137
Total current assets	8,592,564	23,776,747
Property and equipment, net	1,393,393	884,000
Right of use asset, net	404,868	371,189
Intangible assets, net	1,159,642	473,076
Total Assets	$ 11,550,467	$ 25,505,012
Liabilities and Stockholders' Equity		
Current liabilities		
Accounts payable	$ 234,357	$ 155,943
Accrued expenses and other current liabilities	699,953	854,920
Operating lease liability, current portion	413,371	376,622
Total liabilities (all current)	1,347,681	1,387,485
Commitments and contingencies (Note 12)		
Stockholders' Equity		
Preferred stock, $0.00001, 10 million shares authorized; no shares issued and outstanding as of September 30, 2023 and December 31, 2022, respectively	-	-
Common stock, Par $0.00001; 100,000,000 shares authorized, 35,205,748 and 33,684,864 shares issued and outstanding as of September 30, 2023 and December 31, 2022, respectively	352	337
Additional paid-in capital	163,386,142	159,847,229
Accumulated deficit	(153,183,708)	(135,730,039)
Total stockholders' equity	10,202,786	24,117,527
Total Liabilities and Stockholders' Equity	$ 11,550,467	$ 25,505,012

See accompanying notes to consolidated financial statements.

CYNGN INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS
(Unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	**2022**	**2023**	**2022**
Revenue	$ 25,210	$ -	$ 1,448,961	$ -
Costs and expenses				
Cost of revenue	42,414	-	1,121,732	-
Research and development	2,929,225	2,725,919	9,697,099	6,662,730
General and administrative	2,663,272	2,552,418	8,580,113	7,047,181
Total costs and expenses	5,634,911	5,278,337	19,398,944	13,709,911
Loss from operations	(5,609,701)	(5,278,337)	(17,949,983)	(13,709,911)
Other income, net				
Interest income, net	32,905	4,677	98,698	2,691
Other income	105,284	14,296	397,616	16,856
Total other income, net	138,189	18,973	496,314	19,547
Net loss	$ (5,471,512)	$ (5,259,364)	$ (17,453,669)	$ (13,690,364)
Net loss per share attributable to common stockholders, basic and diluted	$ (0.14)	$ (0.14)	$ (0.47)	$ (0.41)
Weighted-average shares used in computing net loss per share attributable to common stockholders, basic and diluted	37,771,928	37,005,071	37,344,276	33,458,338

see accompanying notes to consolidated financial statements.

CYNGN INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(Unaudited)

Three Months Ended September 30, 2022	Convertible Preferred Stock		Common Stock		Additional Paid-in	Accumulated	Total Stockholders'
	Shares	Amount	Shares	Amount	Capital	Deficit	Equity
Balance as of June 30, 2022	-	$ -	33,575,334	$ 336	$ 158,196,733	$ (124,924,530)	$ 33,272,539
Exercise of stock options	-	-	81,000	1	16,510	-	16,511
Issuance of common stock in connection with RSUs	-	-	16,302	-	-	-	-
Stock-based compensation	-		-	-	757,122	-	757,122
Net loss	-	-	-	-	-	(5,259,364)	(5,259,364)
Balance as of September 30, 2022	-	$ -	33,672,636	$ 337	$ 158,970,365	$ (130,183,894)	$ 28,786,808

Three Months Ended September 30, 2023	Convertible Preferred Stock		Common Stock		Additional Paid-in	Accumulated	Total Stockholders'
	Shares	Amount	Shares	Amount	Capital	Deficit	Equity
Balance as of June 30, 2023	-	$ -	33,830,900	$ 338	$ 161,653,902	$ (147,712,196)	$ 13,942,044
Issuance of at-the-market common stock, net of issuance costs	-	-	1,360,620	14	1,012,497	-	1,012,511
Exercise of stock options and vesting of restricted stock units	-	-	14,228	-	460	-	460
Stock-based compensation	-		-	-	719,283	-	719,283
Net loss	-	-	-	-	-	(5,471,512)	(5,471,512)
Balance as of September 30, 2023	-	$ -	35,205,748	$ 352	$ 163,386,142	$ (153,183,708)	$ 10,202,786

Nine Months Ended September 30, 2022	Convertible Preferred Stock		Common Stock		Additional Paid-in	Accumulated	Total Stockholders'
	Shares	Amount	Shares	Amount	Capital	Deficit	Equity
Balance as of December 31, 2021	-	$ -	26,487,680	$ 265	$ 138,740,827	$ (116,493,530)	$ 22,247,562
Exercise of stock options	-	-	717,041	7	114,162	-	114,169
Issuance of common stock and pre-funded warrants in connection with the private placement offering, net of offering costs	-	-	3,790,322	38	11,989,471	-	11,989,509
Issuance of common warrants at fair value in connection with the private placement	-		-	-	6,132,436	-	6,132,436
Issuance of common stock upon exercise of pre-funded warrants	-	-	2,661,921	27	2,635	-	2,662
Issuance of common stock in connection with RSUs	-	-	16,302	-	-	-	-
Stock-based compensation	-	-	-	-	1,990,834	-	1,990,834
Net loss	-	-	-	-	-	(13,690,364)	(13,690,364)
Balance as of September 30, 2022	-	$ -	33,672,636	$ 337	$ 158,970,365	$ (130,183,894)	$ 28,786,808

Nine Months Ended September 30, 2023	Convertible Preferred Stock		Common Stock		Additional Paid-in	Accumulated	Total Stockholders'
	Shares	Amount	Shares	Amount	Capital	Deficit	Equity
Balance as of December 31, 2022	-	$ -	33,684,864	$ 337	$ 159,847,229	$ (135,730,039)	$ 24,117,527
Issuance of common stock in "at-the-market" financing, net of issuance costs			1,360,620	14	1,012,497		1,012,511
Exercise of stock options and vesting of restricted stock units	-	-	160,264	1	8,526	-	8,527
Stock-based compensation	-		-		2,517,890	-	2,517,890
Net loss	-		-		-	(17,453,669)	(17,453,669)
Balance as of September 30, 2023	-	$ -	35,205,748	$ 352	$ 163,386,142	$ (153,183,708)	$ 10,202,786

see accompanying notes to consolidated financial statements.

CYNGN INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)

	Nine Months Ended September 30,	
	2023	**2022**
Cash flows from operating activities		
Net loss	$ (17,453,669)	$ (13,690,364)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	707,337	411,512
Stock-based compensation	2,517,890	1,990,834
Realized gain on short-term investments	(396,141)	(13,541)
Changes in operating assets and liabilities:		
Prepaid expenses, operating lease right-of-use assets, and other current assets	261,034	(835,747)
Accounts payable	78,414	186,797
Accrued expenses, lease liabilities, and other current liabilities	(154,967)	351,524
Net cash used in operating activities	(14,440,102)	(11,598,985)
Cash flows from investing activities		
Purchase of property and equipment	(904,417)	(639,545)
Disposal of assets	130,898	-
Acquisition of intangible asset	(698,527)	(340,850)
Purchase of short-term investments	(17,050,782)	(27,000,000)
Proceeds from maturity of short-term investments	24,892,000	5,025,879
Net cash provided by (used in) investing activities	6,369,172	(22,954,516)
Cash flows from financing activities		
Proceeds from at-the-market equity financing, net of issuance costs	1,012,511	-
Proceeds from private placement offering, net of offering costs	-	18,121,945
Proceeds from exercise of pre-funded warrants	-	2,662
Proceeds from exercise of stock options	8,527	114,169
Net cash provided by financing activities	1,021,038	18,238,776
Net decrease in cash and restricted cash	(7,049,892)	(16,314,725)
Cash and restricted cash, beginning of period	10,586,273	21,995,981
Cash and restricted cash, end of period	$ 3,536,381	$ 5,681,256
Reconciliation of cash and restricted cash, end of period:		
Cash	$ 3,536,381	$ 5,631,256
Restricted cash	-	50,000
Total cash and restricted cash	$ 3,536,381	$ 5,681,256
Supplemental disclosure of cash flow:		
Cash paid during the period for interest and taxes	$ -	$ -
Supplemental disclosure of non-cash activities:		
Recognition of operating lease right-of-use assets and operating lease liabilities	$ 464,929	$ 824,292
Acquisition of property and equipment included in accounts payable and accrued expenses	20,625	28,854

See accompanying notes to consolidated financial statements.

CYNGN INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Unaudited)

1. Description of Business

Cyngn Inc., together with its subsidiaries (collectively, "Cyngn" or the "Company"), was incorporated in Delaware in 2013. Cyngn Singapore PTE. LTD., a Singaporean limited company organized in 2015 and Cyngn Philippines, Inc., a Philippine corporation incorporated in 2018 are wholly owned subsidiaries. The Company is headquartered in Menlo Park, CA.

Cyngn develops autonomous driving software that can be deployed on multiple vehicle types in various environments. The Company has been operating autonomous vehicles in production environments. Built and tested in difficult and diverse real-world environments, the self-driving system ("DriveMod"), fleet management system, and Software Development Kit combine to create a full-stack advanced autonomy solution designed to be modular, extendable, and safe. The Company operates in one business segment.

Liquidity and Going Concern

The Company has incurred losses from operations since inception. The Company incurred net losses of approximately $17.5 million and $13.7 million for the nine months ended September 30, 2023 and 2022, respectively. Accumulated deficit amounted to approximately $153.2 million and $135.7 million as of September 30, 2023 and December 31, 2022, respectively. Net cash used in operating activities was approximately $14.4 million and $11.6 million for the nine months ended September 30, 2023 and 2022, respectively.

The Company's liquidity is based on its ability to enhance its operating cash flow position, obtain capital financing from equity interest investors and borrow funds to fund its general operations, research and development activities, and capital expenditures. The Company's ability to continue as a going concern is dependent on management's ability to successfully execute its business plan, which includes increasing revenue while controlling operating costs and expenses and obtaining funds from outside sources to generate positive financing cash flows. As of September 30, 2023, the Company's unrestricted cash balance was $3.5 million, and its short-term investments balance was $4.6 million. As of December 31, 2022, the Company's cash balance was approximately $10.5 million, and the short-term investments balance was $12.1 million.

Based on cash flow projections from operating and financing activities and the existing balance of cash and short-term investments, management is of the opinion that the Company has insufficient funds for sustainable operations, and it may not be able to meet its payment obligations from operations and related commitments, if the Company is not able to complete the required funding transactions to allow the Company to continue as a going concern. Based on these factors, the Company has substantial doubt that it will continue as a going concern for the 12 months following the date these interim financial statements were issued. These consolidated financial statements do not include any adjustments to reflect the possible future effects on the recoverability and classification of assets and liabilities that may result in the Company not being able to continue as a going concern.

The Company's plan to alleviate the going concern issue is to increase revenue while controlling operating costs and expenses and obtaining funds from outside sources of financing to generate positive financing cash flows. While management is optimistic about its ability to raise substantial funds to continue as a going concern for one year following the financial statement issuance date, there can be no assurance that any such measures will be successful. We currently do not generate substantial revenue from product sales. Accordingly, we expect to rely primarily on equity and/or debt financings to fund our continued operations. The Company's ability to raise additional funds will depend, in part, on the success of our product development activities, and other events or conditions that may affect the share value or prospects, as well as factors related to financial, economic and market conditions, many of which are beyond our control. There can be no assurances that sufficient funds will be available to us when required or on acceptable terms, if at all. Accordingly, management has concluded that these plans do not alleviate substantial doubt about the Company's ability to continue as a going concern.

2. Summary of Significant Accounting Policies

Basis of Presentation

The accompanying unaudited consolidated financial statements as of and for the nine months ended September 30, 2023 and 2022 have been prepared in accordance with accounting principles generally accepted in the United States ("GAAP") and pursuant to applicable rules and regulations of the Securities and Exchange Commission ("SEC"). These financial statements should be read in conjunction with the audited consolidated financial statements and the notes thereto included in the Company's Annual Report on Form 10-K for the fiscal years ended December 31, 2022, and 2021, which was filed with the SEC on March 17, 2023.

The accompanying unaudited consolidated financial statements have been prepared on a consistent basis with the audited consolidated financial statements for the fiscal years ended December 31, 2022, and 2021, and include all adjustments, consisting of only normal recurring adjustments, necessary to fairly state the information set forth herein. There have been no changes to the Company's significant accounting policies described in its Annual Report on Form 10-K for the fiscal years ended December 31, 2022 and 2021 that have had a material impact on the consolidated financial statements and the related notes.

The results reported for the interim period presented are not necessarily indicative of results that may be expected for any subsequent quarter or for the full year December 31, 2023. These unaudited consolidated financial statements include all adjustments and accruals that are necessary for a fair statement of all interim periods reported herein.

Principles of Consolidation

The consolidated financial statements include the accounts of Cyngn Inc. and its wholly owned subsidiaries. Intercompany accounts and transactions have been eliminated upon consolidation.

Foreign Currency Translation

The functional and reporting currency for Cyngn is the U.S. dollar. Monetary assets and liabilities denominated in currencies other than U.S. dollar are translated into the U.S. dollar at period end rates, income and expenses are translated at the weighted average exchange rates for the period and equity is translated at the historical exchange rates. Foreign currency translation adjustments and transactional gains and losses are immaterial to the consolidated financial statements.

Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make certain estimates and assumptions. These estimates and assumptions affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities as of the balance sheet date, as well as reported amounts of revenue and expenses during the reporting period. The Company's significant estimates and judgments include but are not limited to internal-use software and developed software to be sold, leased or marketed, warrants and share-based compensation. Management bases its estimates on historical experience and on various other assumptions believed to be reasonable, the results of which form the basis for making judgments about the carrying values of assets and liabilities. Actual results could differ from those estimates.

Concentration of Credit Risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist of cash, which is placed with high-credit-quality financial institutions and at times exceeds federally insured limits.

Cash maintained with domestic financial institutions generally exceed the Federal Deposit Insurance Corporation insurable limit. To date, the Company has not experienced any losses on its deposits of cash. Cyngn invests in U.S. Treasury securities and carries these at amortized cost and recognizes gains and losses when realized.

Concentration of Supplier Risk

The Company generally utilizes suppliers for outside development and engineering support. The Company does not believe that there is any significant supplier concentration risk as of September 30, 2023 and December 31, 2022.

Cash, Restricted Cash and Short-term Investments

The Company considers its bank accounts and all highly liquid investments that are both readily convertible to cash with minimal risk of changes in value due to changes in interest rates, to be cash. As of September 30, 2023 and December 31, 2022, the Company had approximately $3.5 million and $10.5 million of cash, respectively.

The Company considers short-term investments to include marketable U.S. government securities that it intends to hold until maturity and redeem within one year. The Company treated its U.S. government treasury bill placements as held-to-maturity securities in accordance with the Financial Accounting Standards Board's ("FASB") Accounting Standards Codification Topic ("ASC") 320, "Investments – Debt and Equity Securities", and recorded these securities at amortized cost on the accompanying consolidated balance sheets as of September 30, 2023 and December 31, 2022.

Accounts Receivable

Accounts receivables are recorded at the invoiced amount and do not bear interest. The Company provides for probable uncollectible amounts based upon its assessment of the current status of the individual receivables and after using reasonable collection efforts. The allowance for doubtful accounts was zero as of September 30, 2023 and December 31, 2022.

Fair Value Measurements

The accounting guidance under ASC Topic 820, "Fair Value Measurement", defines fair value, establishes a consistent framework for measuring fair value, and expands disclosure for each major asset and liability category measured at fair value on either a recurring or nonrecurring basis. Fair value is defined as an exit price representing the amount that would be received to sell an asset or paid to transfer a liability (an exit price) in an orderly transaction between market participants. As such, fair value is considered a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or liability.

The Company uses the following fair value hierarchy prescribed by U.S. GAAP, which prioritizes the inputs used to measure fair value as follows:

Level 1—Unadjusted quoted prices in active markets for identical assets or liabilities.

Level 2—Observable inputs other than Level 1 prices, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

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.

Assets and liabilities are considered to be fair valued on a recurring basis if fair value is measured regularly. However, if the fair value measurement of an instrument does not necessarily result in a change in the amount recorded on the consolidated balance sheets, assets and liabilities are considered to be fair valued on a nonrecurring basis. This typically occurs when accounting guidance requires assets and liabilities to be recorded at the lower of cost or fair value, or on certain nonfinancial assets and liabilities. Nonfinancial assets and liabilities that are measured at fair value on a nonrecurring basis include certain long-lived assets, intangible assets, and share-based compensation measured at fair value upon initial recognition.

The carrying amounts of the Company's cash and accounts payable are reasonable estimates of their fair values due to their short-term nature. The fair values of the Company's share-based compensation and underwriter warrants were based on observable inputs and assumptions used in Black-Scholes valuation models derived from independent external valuations.

Property and Equipment

Property and equipment is stated at cost less accumulated depreciation and amortization. Construction work in progress includes production costs and costs of materials used in the development of the Company's autonomous driving software. Assets are held as construction work in progress until placed into service, at which date depreciation commences over the estimated useful lives of the respective assets. Depreciation is recorded on a straight-line basis over each asset's estimated useful life. Repair and maintenance costs are expensed as incurred.

Property and Equipment	**Useful life**
Internal-use software	3 to 5 years
Computer and equipment	5 years
Furniture and fixtures	7 years
Leasehold improvements	Shorter of 3 years or lease term
Automobile	5 years

Leases

The Company accounts for leases in accordance with ASC Topic 842 ("ASC 842"), "Leases". All contracts are evaluated to determine whether or not they represent a lease. A lease conveys the right to control the use of an identified asset for a period of time in exchange for consideration. Leases are classified as finance or operating in accordance with the guidance in ASC 842. The Company does not hold any finance leases. The Company recognized a "right-of-use" asset and lease liability in the consolidated balance sheets under ASC 842 on the office space lease that was amended and renewed in June 2023. On a prospective basis, lease expense will be recognized on a straight-line basis over the remaining term of the lease. Operating leases are recognized on the balance sheet as right-of-use assets, and operating lease liabilities.

Costs to Develop Software

The Company incurs costs related to software internally developed. Based on the nature of the software the Company capitalizes software costs under the following guidance.

Internal-Use Software costs

The Company determined when to capitalize its internal-use software after planning and design efforts are successfully completed. Management has implicitly authorized funding and the software is expected to be completed and used as intended. The Company determines the amount of internal software costs to be capitalized based on the amount of time spent by the developers on projects in the application stage of development. There is judgment involved in estimating time allocated to a particular project in the application stage. Costs associated with building or significantly enhancing the internally built software platform for internal use is capitalized, while costs associated with planning new developments and maintaining the internally built software platforms are expensed as incurred. Capitalized costs include certain payroll and stock compensation costs, as well as subscription server and consulting costs.

Internal-use software is classified as property and equipment and is amortized on a straight-line basis over their estimated useful life of three to five years. There is judgment involved in the determination of the useful life. Amortization of the software asset will begin when the software is substantially complete and ready for its intended use. No amortization has begun for the internal use software, as the projects are still in the application development phase. Management evaluates the useful lives of these assets on a quarterly basis and tests for impairment whenever events or changes in circumstances occur that could impact the recoverability of these assets.

Costs to develop software to be sold, leased or otherwise marketed

The Company accounts for research costs of computer software to be sold, leased or otherwise marketed as expense until technological feasibility has been established for the product. Once technological feasibility is established, certain payroll and stock compensation, occupancy, and professional service costs that are incurred to develop functionality for the Company's software and internally built software platforms, as well as certain upgrades and enhancements that are expected to result in enhanced functionality are capitalized. Judgment is required in determining when technological feasibility of a product is established. The Company recognizes technological feasibility when a working model is complete. Amortization will begin when the product or enhancement is available for general release to customers.

Computer software to be sold, leased or otherwise marketed is classified as an intangible asset. Capitalized software development costs are amortized using the greater of (a) the amount computed using the ratio that current gross revenue for a product bear to total of current and anticipated future gross revenue for that product or (b) the straight-line method, beginning upon commercial release of the product, and continuing over the remaining estimated economic life of the product, not to exceed three years to five years and recorded as cost of revenue. No amortization has begun for externally sold software, as the software enhancement is still in development. Management evaluates the useful lives of these assets on a quarterly basis and tests for impairment whenever events or changes in circumstances occur that could impact the recoverability of these assets. No impairment charges were associated with the Company's sold, leased or otherwise marketed software for the three and nine months ended September 30, 2023.

Long-Lived Assets and Finite Lived Intangibles

The Company has finite-lived intangible assets consisting of patents and trademarks. These assets are amortized on a straight-line basis over their estimated remaining economic lives. The patents and trademarks are amortized over 15 years.

On April 1, 2022, the Company entered into an agreement for exclusive rights to certain hardware and software products and the rights to subsequently sell the software products and accompanying services. The Company paid a purchase price of $100,000 for these rights. The Company evaluated if substantially all of the assets acquired are concentrated in a single identifiable asset or group of similar identifiable assets to determine if the transaction should be accounted for as an asset acquisition. Since the only substantive assets acquired pertained to rights to intellectual property, the entire purchase price was allocated to intellectual property and accounted for as intangible assets with a useful life of 15 years. In accordance with ASC 805-50, "Business Combination", the agreement was treated as an asset acquisition rather than a business combination.

The Company reviews its long-lived assets and finite-lived intangibles for impairment whenever events or changes in circumstances indicate that the carrying value may not be recoverable. The events and circumstances the Company monitors and considers include significant decreases in the market price of similar assets, significant adverse changes to the extent and manner in which the asset is used, an adverse change in legal factors or business climate, an accumulation of costs that exceed the estimated cost to acquire or develop a similar asset, and continuing losses that exceed forecasted costs. The Company assesses the recoverability of these assets by comparing the carrying amount of such assets or asset group to the future undiscounted cash flow it expects the assets or asset group to generate. The Company recognizes an impairment loss if the sum of the expected long-term undiscounted cash flows that the long-lived asset is expected to generate is less than the carrying amount of the long-lived asset being evaluated. An impairment charge would then be recognized equal to the amount by which the carrying amount exceeds the fair value of the asset. No impairment charges were associated with the Company's intangible assets for the three and nine months ended September 30, 2023 and 2022.

Income Taxes

The Company accounts for income taxes using the asset and liability method, under which deferred tax assets and liabilities are recognized for the expected future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax basis.

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 lack of earnings history, the net deferred tax assets have been fully offset by a valuation allowance as of September 30, 2023 and December 31, 2022 (see Note 11. Income Taxes).

There are no uncertain tax positions that would require recognition in the consolidated financial statements. If the Company were to incur an income tax liability in the future, interest on any income tax liability would be reported as interest expense and penalties on any income tax would be reported as income taxes. Management's conclusions regarding uncertain tax positions may be subject to review and adjustment at a later date based upon ongoing analysis of or changes in tax laws, regulations and interpretations thereof as well as other factors.

Convertible Preferred Stock

The Company has applied the guidance in ASC 480-10-S99-3A, SEC Staff Announcement, "Classification and Measurement of Redeemable Securities", and has classified all of its outstanding convertible preferred shares as permanent equity. The Company records shares of convertible preferred stock at their respective issuance price, net of issuance costs. The Company's convertible preferred stock share's redemption and conversion provisions are not exclusively at the option of the holder and are contingent on certain deemed liquidation events within the Company's control (see Note 7. Capital Structure).

Warrants

The Company issued to its lead underwriter in the Company's IPO warrants to purchase up to 140,000 shares of the Company's common stock. In addition, the Company issued 6,451,613 Common Warrants as a part of the private placement offering. The Company accounts for warrants in accordance with ASC 480, "Distinguishing Liabilities from Equity". The Company determined the fair value of the warrants using the Black-Scholes pricing model and treated the warrants as equity instruments in consideration of the cashless settlement provisions in the warrant agreement.

The Company also applied the guidance in ASC 340-10-S99-1, "Other Assets and Deferred Costs", that states specific incremental costs directly attributable to a proposed or actual offering of equity securities may properly be deferred and charged against the gross proceeds of the offering. The Company treated the valuation of the warrants as directly attributable to the issuance of an equity contract and accordingly, classified the warrants as additional paid-in capital.

Stock-based Compensation

The Company recognizes the cost of share-based awards granted to employees and directors based on the estimated grant-date fair value of the awards. Cost is recognized on a straight-line basis over the service period, which is generally the vesting period of the award. The Company recognizes stock-based compensation cost and reverses previously recognized costs for unvested awards in the period forfeitures occur. The Company determines the fair value of stock options using the Black-Scholes option pricing model, which is impacted by the fair value of common stock, expected price volatility of common stock, expected term, risk-free interest rates, and expected dividend yield (see Note 9. Stock-based Compensation Expense).

Net Loss Per Share Attributable to Ordinary Shareholders

The Company computes loss per share attributable to common shareholders by dividing net loss attributable to common shareholders by the weighted-average number of common shares outstanding. Diluted net loss per share reflects the potential dilution that could occur if securities or other contracts to issue shares were exercised into shares. In calculating diluted net loss per share, the numerator is adjusted for the change in the fair value of the shares (only if dilutive) and the denominator is increased to include the number of potentially dilutive common shares assumed to be outstanding (see Note 8. Net Loss per Share Attributable to Common Stockholders).

Research and Development Expense

Research and development expense consist primarily of outsourced engineering services, internal engineering and development expenses, materials, labor and stock-based compensation of Company personnel involved in the development of the Company's products and services, and allocated lease costs based on the approximate square footage area used in research and development activities. Research and development costs are expensed as incurred.

Selling, General, and Administrative Expense

Selling, general, and administrative expense consist primarily of personnel costs, facilities expenses, depreciation and amortization, travel, and advertising costs.

Commitments

The Company recognizes a liability with regard to loss contingencies when it believes it is probable a liability has occurred and the amount can be reasonably estimated. If some amount within a range of loss appears at the time to be a better estimate than any other amount within the range, the Company accrues that amount. When no amount within the range is a better estimate than any other amount the Company accrues the minimum amount in the range. There have been no such liabilities recorded by the Company as of September 30, 2023 and December 31, 2022.

Segment Reporting

The Company's chief operating decision maker, its Chief Executive Officer, manages operations and business as one operating segment for the purposes of allocating resources, making operating decisions and evaluating financial performance.

Revenue Recognition

The Company enters into Non-Recurring Engineering ("NRE") contracts that are principally comprised of engineering services related to customer-specific configuration of the DriveMod. Generally, with respect to these NRE contracts, i) the determination of the contract price is based on labor and hardware costs estimated to achieve the required milestones specified in the contract; ii) payment under these arrangements are comprised of upfront payments due upon execution of the agreements as well as payments due upon the achievement of milestones specified in each arrangement; and iii) contain mutual termination clauses without penalty. The Company recognizes revenue from NRE contracts that are fully funded by customers and the sale of its products when promised goods or services are transferred to customers. Each of the Company's NRE arrangements are comprised of multi-phase deliverables recognized at a point in time upon completion and acceptance from the customer of each phase of the arrangement.

For NRE contracts revenue, the Company recognizes revenue in an amount that reflects the consideration to which the Company expects to be entitled in exchange for those goods or services, by following a five-step process which includes i) identify the contract with a customer; ii) identify the performance obligations in the contract; iii) determine the transaction price; iv) allocate the transaction price to performance obligations in the contract and; v) recognize revenue when or as the Company satisfies a performance obligation.

Of the $1.4 million of revenue for the nine months ended September 30, 2023, two domestic customers which are subsidiaries of global conglomerates represented 38.0% and 60.0% associated with NRE contracts. There were no accounts receivable for these two customers at September 30, 2023 and December 31, 2022.

All other revenue streams for the three and nine months ended September 30, 2023 and 2022 are not material.

Cost of Revenue

Cost of revenue consists primarily of direct labor and related fringe benefits for internal engineering resources, and deployment related travel costs incurred for the completion of the contracts and hardware costs.

Recent Accounting Standards

In June 2016, the FASB issued Accounting Standards Update ("ASU") 2016-13, "Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments", which provides new guidance regarding the measurement and recognition of credit loss impairment for certain financial assets. The Company adopted this standard in the first quarter of 2023 and there was no impact on our consolidated financial statements upon adoption. As a result of this standard, the Company utilizes current and historical collection data as well as assesses current economic conditions in order to determine expected trade credit losses on a prospective basis. The adoption of this standard did not result in any material impact to our allowance for doubtful accounts balance as of September 30, 2023. In addition, the Company evaluated their debt securities for credit losses. Because the Company's sole investments of held-to-maturity debt securities are short-term U.S. Treasury bills, no provision for credit losses on such securities was deemed necessary.

3. Revenue and Contracts with Customers

Contract Balances

Timing differences between revenue recognized, billings, and customer payments result in contract assets and liabilities. Contract assets represent revenue recognized in excess of customer billings. Contract liabilities represent payments received from customers in advance of satisfying performance obligations. The Company had $5,794 of contract assets and no liabilities as of September 30, 2023 and no contract assets or liabilities as of December 31, 2022. The contract assets are included in prepaid and other current assets in the consolidated balance sheets.

Deferred Contract Costs

The Company defers costs associated with fulfilling its contracts if those costs meet all of the following criteria: (i) the costs relate directly to a contract, (ii) the costs generate or enhance resources of the Company that will be used in satisfying performance obligations in the future, and (iii) the costs are expected to be recovered. The Company had deferred contract costs totaling $25,358 and $114,654 as of September 30, 2023 and December 31, 2022, respectively. Deferred contract costs are included in prepaid and other current assets in the consolidated balance sheets.

4. Balance Sheet Components

Financial Instruments

The Company's short-term investments consisted of U.S. government treasury bills, which are accounted for as held-to-maturity ("HTM") securities. HTM securities are carried at amortized cost and, as a result, are not remeasured to fair value on a recurring basis. As of September 30, 2023 and December 31, 2022, the amortized cost of the Company's U.S. government treasury bills totaled $4.6 million and $12.1 million, respectively, which approximated its fair value based on Level 1 inputs. All of the Company's short-term investments will mature within one year of September 30, 2023. The Company does not expect a credit loss for its short-term investments.

Property and Equipment, Net

Property and equipment is comprised of the following:

	September 30, 2023	December 31, 2022
Automobiles	$ 551,192	$ 397,816
Furniture and fixtures	178,491	176,402
Computer and equipment	506,233	380,457
Capitalized software	218,908	-
Leasehold improvements	522,647	93,120
Construction work in progress	203,133	359,289
Property and equipment, gross	2,180,604	1,407,084
Less: accumulated depreciation and amortization	(787,211)	(523,084)
Total property and equipment, net	$ 1,393,393	$ 884,000

Depreciation and amortization expense for the three months ended September 30, 2023 and 2022 was $89,625 and $42,285, respectively, and for the nine months ended September 30, 2023 and 2022 was $264,127 and 87,690, respectively.

Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities are comprised of the following:

	September 30, 2023	December 31, 2022
Credit card payable	$ 7,029	$ 5,194
Accrued expenses	245,409	283,118
Accrued payroll	447,515	566,608
Total accrued expenses and other current liabilities	$ 699,953	$ 854,920

5. Leases

The Company leases its office space in Menlo Park, California, under a lease agreement which expired in February 2022 and was subsequently renewed in June 2023 and amended for a 12-month term that expires in May 2024. Monthly payments are approximately $48,000. The lease includes non-lease components (i.e., common area maintenance costs) that are paid separately from rent based on actual costs incurred.

The Company's future lease payments under non-cancellable leases as of September 30, 2023, which are presented as lease liabilities on the Company's consolidated balance sheet, are as follows:

Period	Operating Lease
Remainder of 2023	$ 157,350
2024	262,248
Total lease payments	419,598
Less: imputed interest	(6,227)
Present value of lease liabilities, all current	$ 413,371
Weighted-average remaining lease term (in years)	0.67
Weighted-average discount rate	2.46%

Lease expense was $100,251 and $142,037 for the three months ended September 30, 2023 and 2022, respectively, and $393,162 and $375,610 for the nine months ended September 30, 2023 and 2022, respectively. The amortization of the operating lease right-of-use assets totaled $149,051 and $135,326 for the three months ended September 30, 2023 and 2022, respectively, and $431,250 and $316,436 for the nine months ended September 30, 2023 and 2022, respectively. The weighted average discount rate is based on the implicit interest rate of the present value of the remaining lease payments and the remaining lease term.

6. Intangible Assets, Net

The gross carrying amount and accumulated amortization of separately identifiable intangible assets are as follows:

	As of September 30, 2023		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Developed software	$ 542,692	$ -	$ 542,691
Patents	519,656	(16,566)	503,090
Trademark	45,000	(22,250)	22,750
Rights to intellectual property	100,000	(8,890)	91,110
Total intangible assets	$ 1,207,348	$ (47,706)	$ 1,159,642

	As of December 31, 2022		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Developed software	$ -	$ -	$ -
Patents	363,821	(11,856)	351,965
Trademark	45,000	(20,000)	25,000
Rights to intellectual property	100,000	(3,889)	96,111
Total intangible assets	$ 508,821	$ (35,745)	$ 473,076

Amortization expense for each of the three months ended September 30, 2023 and 2022 was $4,751 and $4,798, respectively, and for the nine months ended September 30, 2023 and 2022 was $11,960 and $7,385, respectively. There was no amortization expense for the developed software for the three months and nine months ended September 30, 2023 and 2022.

Estimated amortization expense for all intangible assets subject to amortization in future years is expected to be:

Years ended December 31,	Amortization
Remainder 2023	$ 4,751
2024	25,975
2025	25,975
2026	25,975
2027	25,975
Thereafter	1,050,991
Total	$ 1,159,642

7. Capital Structure

Common Stock

As of September 30, 2023 and December 31, 2022, the Company is authorized to issue 100,000,000 shares of common stock with a par value of $0.00001 per share. As of September 30, 2023 and December 31, 2022, the Company had 35,205,748 and 33,684,864 shares of common stock issued and outstanding, respectively. Holders of common stock have no preemptive, conversion or subscription rights and there are no redemption or sinking fund provisions applicable to the common stock. The rights, preferences and privileges of the holders of common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of preferred stock that the Company may designate in the future.

Convertible Preferred Stock

In October 2021, the Company amended its Certificate of Incorporation and revised the number of preferred stock shares authorized for issuance to 10,000,000 shares at a par value of $0.00001. As of September 30, 2023 and December 31, 2022, there were no shares of preferred stock issued and outstanding.

At the Market Equity Financing

On May 31, 2023, the Company entered into an ATM Sales Agreement with Virtu Americas LLC (the "ATM Sales Agreement"), under which the Company may, from time to time, sell shares of the Company's common stock at market prices by methods deemed to be an "at-the-market offering" as defined in Rule 415 promulgated under the Securities Act of 1933, as amended. The ATM Sales Agreement and related prospectus is limited to sales of up to an aggregate maximum $8.8 million of shares of the Company's common stock. The Company pays Virtu Americas LLC up to 3.0% of the gross proceeds as a commission. For the nine months ended as of September 30, 2023, a total of 1,360,620 shares of common stock were sold through Virtu Americas LLC under the ATM Sales Agreement for net proceeds of $1,012,511 after payment of commission fees of $21,051 and other related expenses of $25,000. Sale of shares after September 30, 2023 is reported in Note 14, Subsequent events.

Private Placement Offering

On April 28, 2022, the Company entered into a Securities Purchase Agreement (the "Purchase Agreement") with certain accredited and institutional investors for a private placement offering ("Private Placement") of the Company's common stock (the "Common Stock") and pre-funded warrants (the "Pre-Funded Warrants") and warrants exercisable for Common Stock (the "Common Warrants"). Pursuant to the Purchase Agreement, the Company sold (i) 3,790,322 shares of its Common Stock together with Common Warrants to purchase up to 3,790,322 shares of Common Stock, and (ii) 2,661,291 Pre-Funded Warrants with each Pre-Funded Warrant exercisable for one share of Common Stock, together with Common Warrants to purchase up to 2,661,291 shares of Common Stock. The Common Warrants totaled 6,451,613. The Company allocated the proceeds between the Common Stock, Pre-Funded Warrants, and Common Warrants on a relative fair value basis and recorded the amount allocated to the Common Warrants within additional paid-in capital on the accompanying consolidated balance sheet as the Common Warrants met all the criteria for equity classification. As the Common Warrants were equity classified, they do not require subsequent remeasurement after the issuance (see below).

The Pre-Funded Warrants were exercised in full in May 2022 at a nominal exercise price of $0.001. Each share of Common Stock and accompanying Common Warrant were sold together at a combined offering price of $3.10, and each Pre-Funded Warrant and accompanying Common Warrant were sold together at a combined offering price of $3.09.

The Common Warrants have an exercise price of $2.98 per share (subject to adjustment as set forth in the warrant), are exercisable upon issuance and will expire five years from the date of issuance. The Common Warrants contain standard adjustments to the exercise price including for stock splits, stock dividends, rights offerings and pro rata distributions. There were no Common Warrants exercised as of December 31, 2022 (see below).

The Private Placement closed on April 29, 2022. The Company received gross proceeds of approximately $20 million before deducting transaction related expenses payable by the Company. All qualified legal, accounting, registration and other direct costs related to the Private Placement were offset against the gross proceeds. The Company is using the net proceeds to fund its cash needs.

Warrants

The following warrants were outstanding as of September 30, 2023, all of which contain standard anti-dilution protections in the event of subsequent rights offerings, stock splits, stock dividends or other extraordinary dividends, or other similar changes in the Company's common stock or capital structure, and none of which have any participating rights for any losses:

Securities into which warrants are convertible	**Warrants outstanding**	**Exercise Price**	**Expiration Date**	**Fair value**
Common stock (Initial Public Offering)	140,000	$ 9.375	October 2026	$ 170,397
Common stock (Private Placement)	6,451,613	$ 2.98	April 2027	6,132,436
Total	6,591,613			$ 6,302,833

The Company accounts for warrants in accordance with ASC 480, "Distinguishing Liabilities from Equity", depending on the specific terms of the warrant agreement. The Company determined the fair value of the warrants using the Black-Scholes pricing model and treated the valuation as equity instruments in consideration of the cashless settlement provisions in the warrant agreements. The warrants are not marked-to-market each reporting period, and thus there is no impact to earnings. Any future exercises of the warrants will be recorded as cash received and recorded in cash, with a corresponding increase to common stock and additional paid-in capital in stockholders' equity.

The Company used the following assumptions:

	Initial Public Offering Warrants	**Private Placement Warrants**
Fair value of underlying securities	$ 2.88	$ 1.37
Expected volatility	51.0%	45.0%
Expected term (in years)	5.0	5.0
Risk-free interest rate	1.13%	2.92%

8. Net Loss Per Share Attributable to Common Stockholders

The following table summarizes the computation of basic and diluted loss per share:

	Three-months Ended September 30,	
	2023	2022
Net loss attributable to common stockholders	$ (5,471,512)	$ (5,259,364)
Basic and diluted weighted average common shares outstanding	37,771,928	37,005,071
Loss per share:		
Basic and diluted	$ (0.14)	$ (0.14)

	Nine-months Ended September 30,	
	2023	2022
Net loss attributable to common stockholders	$ (17,453,669)	$ (13,690,364)
Basic and diluted weighted average common shares outstanding	37,344,276	33,458,338
Loss per share:		
Basic and diluted	$ (0.47)	$ (0.41)

Basic loss per share is based upon the weighted average number of shares of common stock outstanding during the period. Diluted loss per share would include the effect of unvested restricted stock awards and the convertible preferred stock; however, such items were not considered in the calculation of the diluted weighted average common shares outstanding since they would be anti-dilutive.

9. Stock-based Compensation Expense

Stock-Based Compensation

The Company uses stock-based compensation, including restricted stock units, to provide long-term performance incentives for its employees and board directors. The Company measures employee and director stock-based compensation awards based on the award's estimated fair value on the date of grant. Forfeitures are recognized as they occur. Expense associated with these awards is recognized using the straight-line attribution method over the requisite service period for stock options, restricted stock units ("RSUs") and restricted stock and is reported in our consolidated statements of stockholders' equity.

The fair value of the Company's stock options is estimated, using the Black-Scholes option-pricing model. The resulting fair value is recognized on a straight-line basis over the period during which an employee is required to provide service in exchange for the award. The Company has elected to recognize forfeitures as they occur. Stock options generally vest over four years and have a contractual term of ten years.

Determining the grant date fair value of options requires management to make assumptions and judgments. These estimates involve inherent uncertainties and if different assumptions had been used, stock-based compensation expense could have been materially different from the amounts recorded.

The assumptions and estimates for valuing stock options are as follows:

- *Fair value per share of Company's common stock.* Because there was no public market for Cyngn's common stock prior to the IPO, its Board of Directors, with the assistance of a third-party valuation specialist, determined the common stock fair value at the time of the grant of stock options by considering a number of objective and subjective factors, including its actual operating and financial performance, market conditions and performance of comparable publicly traded companies, developments and milestones in the company, and the likelihood of achieving a liquidity event among other factors. Since the Company's common stock began publicly trading on the Nasdaq, the value of its common stock underlying stock options or RSUs have been valued based on prevailing market prices.

- *Expected volatility.* Because the Company's common stock had no publicly traded history prior to the IPO, it estimated the expected volatility using its own stock price volatility to the extent applicable or a combination of its stock price volatility and the stock price volatility of peer companies, for a period equal to the expected term of the options.

- *Expected term.* The expected term of employee stock options represents the weighted-average period that the stock options are expected to remain outstanding. The Company estimates the expected term of options granted based upon the "simplified method" provided under *Staff Accounting Bulletin, Topic 14*, or SAB Topic 14.

- *Risk-free interest rate.* The risk-free interest rate is based on the U.S. Treasury yield curve in effect during the period the options were granted corresponding to the expected term of the awards.

- *Estimated dividend yield.* The estimated dividend yield is zero, as the Company does not currently intend to declare dividends in the foreseeable future.

Equity Incentive Plans

In February 2013, the Company's Board of Directors adopted the 2013 Equity Incentive Plan ("2013 Plan"). The 2013 Plan authorizes the award of stock options, stock appreciation rights, restricted stock awards, stock appreciation rights, RSUs, performance awards, and other stock or cash awards.

In October 2021, the Company's Board of Directors adopted the Cyngn Inc. 2021 Equity Incentive Plan (the "2021 Plan"). The 2021 Plan replaces the 2013 Plan. However, awards outstanding under the 2013 Plan will continue to be governed by their existing terms.

As of September 30, 2023 and December 31, 2022, approximately 2.5 million and 3.6 million shares of common stock were reserved and available for issuance under the 2021 Plan, respectively.

Options issued under the Plans generally vest based on continuous service provided by the option holder over a four-year period. Compensation expense related to these options is recognized on a straight-line basis over the four-year period based upon the fair value at the grant date.

The following table summarizes information about the Company's stock options outstanding as well as stock options vested and exercisable as of September 30, 2023, and activity during the year then ended:

	Shares	Weighted-average exercise price	Weighted-average remaining contractual term (years)	Aggregate intrinsic value
Outstanding as of December 31, 2022	14,715,110	$ 1.23	7.84	$ 2,571,013
Granted	2,451,000	1.03		
Exercised	(25,750)	0.33		16,403
Cancelled/forfeited	(1,423,106)	1.62		
Outstanding as of September 30, 2023	15,717,254	$ 1.16	7.32	$ 1,574,941
Vested and expected to vest at September 30, 2023	15,717,254	$ 1.16	7.32	$ 1,574,941
Vested and exercisable at September 30, 2023	7,984,039	$ 0.92	5.72	$ 1,574,941

The following table summarizes information about the Company's RSUs as of September 30, 2023, and activity during the year then ended:

	Shares	Weighted-average grant date fair value
Unvested shares at December 31, 2022	216,036	$ 5.52
RSUs granted	108,000	1.05
RSUs vested	(134,514)	5.52
RSUs forfeited	-	-
Unvested Shares at September 30, 2023	189,522	$ 2.97

The fair value of a stock option is estimated using the Black-Scholes option-pricing model that takes into account as of the grant date the exercise price and expected life of the option, the current price of the underlying stock and its expected volatility, expected dividends on the stock, and the risk-free interest rate for the expected term of the option. The Company has used the simplified method in calculating the expected term of all option grants based on the vesting period and contractual term. Compensation costs related to share-based payment transactions are recognized in the financial statements upon satisfaction of the requisite service or vesting requirements.

The weighted average per share grant-date fair value of options granted during the nine months September 30, 2023 and 2022 was $0.55 and $0.74, respectively.

The following weighted average assumptions were used in estimating the grant date fair values in September 30, 2023 and 2022:

	September 30, 2023	September 30, 2022
Fair value of common stock	$ 1.02	$ 1.76
Expected term (in years)	6.02	6.05
Risk-free rate	3.63%	2.6%
Expected volatility	52.74%	40.3%
Dividend yield	0%	0%

We recorded stock-based compensation expense from stock options and RSUs of approximately $719,283 and $757,122, during the three months ended September 30, 2023 and 2022, respectively, and $2,517,890 and $1,990,834, during the nine months ended September 30, 2023 and 2022, respectively.

As of September 30, 2023, total stock-based compensation cost related to outstanding unvested stock options that are expected to vest was approximately $7.3 million. This unrecognized stock-based compensation cost is expected to be recognized over a weighted-average period of approximately 2.9 years. Income tax benefits recognized from stock-based compensation expense recognized for the nine months ended September 30, 2023 were immaterial due to cumulative losses and valuation allowances.

10. Retirement Savings Plan

Effective November 17, 2017, the Company established the Cyngn Inc. 401(k) Plan for the exclusive benefit of all eligible employees and their beneficiaries with the intention to provide a measure of retirement security for the future. This plan is subject to the provisions of the Employee Retirement Income Security Act of 1974 (ERISA) and qualifies under Section 401(k) of the Internal Revenue Code. Cyngn, Inc. did not offer and has not provided a company match for its 401(k) Plan.

11. Income Taxes

For the three and nine months ended September 30, 2023 and 2022, the Company recorded income tax expense of $0. The effective tax rate is 0% for the three and nine months ended September 30, 2023 and 2022.

For financial reporting purposes, the Company's effective tax rate used for the interim periods is based on the estimated full-year income tax rate. For the three and nine months ended September 30, 2023, the Company's effective tax rate differs from the statutory rate, primarily due to a valuation allowance recorded against the net deferred tax asset balance.

Currently, the Company is not under examination by any taxing authority.

12. Commitments and Contingencies

Legal Proceedings

The Company is subject to legal and regulatory actions that arise from time to time. The assessment as to whether a loss is probable or reasonably possible, and as to whether such loss or a range of such loss is estimable, often involves significant judgment about future events, and the outcome of litigation is inherently uncertain. There is no material pending or threatened litigation against the Company that remains outstanding as of September 30, 2023 and December 31, 2022.

13. Risks and Uncertainties

The Company's business operations, operating results, and financial condition are vulnerable to certain risks and uncertainties including:

- Inflation and its related impact on costs and expenditures on domestic and foreign-sourced materials and services;
- Rising interest rates and its impact on the equity markets, investment valuations, and interest rate-sensitive calculations such as discount rate assumptions used in cash flow projections and going-concern assessments;
- Effects of the Russia-Ukraine conflict such as possible cyberattacks and potential disruptions in the banking systems and capital markets and the supply chain; and
- Other factors beyond its control such as natural disasters, terrorism, civil unrest, infectious diseases and pandemics including COVID-19 and its variants.

The Company is unable to predict and quantify at this time the extent of the related potential adverse effects but continuously monitors these risks and uncertainties on its future operations and financial performance.

14. Subsequent Events

Stock Dividend

Subsequent to September 30, 2023, the Company declared a special one-time stock dividend of 10% on the Company's common stock to shareholders of record as of October 23, 2023, which was paid on October 30, 2023. The Company issued an aggregate of 3,572,978 shares of common stock to its shareholders and warrant holders. The weighted-average exercise price per share of an aggregate of 7,236,776 outstanding warrants to purchase shares of common stock of the Company was adjusted from $3.12 to $2.82.

Shares Authorized

On November 7, 2023, the shareholders of the Company approved the filing of a certificate of amendment to the Fifth Amended and Restated Certificate of Incorporation to increase the authorized shares of common stock from 100,000,000 to 200,000,000.

On November 7, 2023, the shareholders of the Company approved an amendment to the Company's 2021 Equity Incentive Plan (the "2021 Plan") to increase the number of shares authorized for issuance by 5,000,000 shares of common stock and to allow an annual increase to the 2021 Plan equal to the least of (i) 5% of the outstanding common stock on a fully diluted basis as of the end of the Company's immediately preceding fiscal year, (ii) 2,500,000 shares, or (iii) a lesser amount as determined by the Board. As of September 30, 2023, a total of 12,000,000 shares of common stock was authorized under the 2021 Plan, with the total shares increased to 17,000,000 of common stock as approved by the Company's shareholders.

ATM

As of November 7, 2023, the Company has sold 2,370,904 additional shares under the ATM Sales Agreement, for net proceeds of $770,092 after payment of commission and fees of $15,716.

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

The objective of this Management's Discussion and Analysis is to allow investors to view the Company from management's perspective, considering items that would have a material impact on future operations. The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our consolidated financial statements and the accompanying notes thereto included elsewhere in this Quarterly Report on Form 10-Q and our Annual Report on Form 10-K for the fiscal year ended December 31, 2022 (the "Form 10-K"), which we filed with the U.S. Securities and Exchange Commission ("SEC") on March 17, 2023. The information in this discussion contains forward-looking statements and information within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act, which are subject to the "safe harbor" created by those sections. These forward-looking statements include, but are not limited to, statements concerning our strategy, future operations, future financial position, future revenues, projected costs, prospects and plans and objectives of management. The words "anticipates," "believes," "estimates," "expects," "intends," "may," "plans," "projects," "will," "would" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. We may not actually achieve the plans, intentions, or expectations disclosed in our forward-looking statements and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements that we make. These forward-looking statements involve risks and uncertainties that could cause our actual results to differ materially from those in the forward-looking statements, including, without limitation, the risks set forth in our other filings with the SEC, including the Form 10-K. The forward-looking statements are applicable only as of the date on which they are made, and we do not assume any obligation to update any forward-looking statements.

Unless the context requires otherwise, references in this Quarterly Report on Form 10-Q to "we," "us," "our," and Cyngn refer to Cyngn Inc. and its consolidated subsidiaries.

Overview

We are an autonomous vehicle ("AV") technology company that is focused on addressing industrial uses for autonomous vehicles. We believe that technological innovation is needed to enable adoption of autonomous industrial vehicles that will address the substantial industry challenges that exist today. These challenges include labor shortages, lagging technological advancements from incumbent vehicle manufacturers, and high upfront investment commitment.

Industrial sites are typically rigid environments with consistent standards as opposed to city streets that have more variable environmental and situational conditions and diverse regulations. These differences in operational design domains will be major factors that make proliferation of industrial AVs in private settings achievable with less time and resources than AVs on public roadways. Namely, safety and infrastructure challenges are cited as roadblocks that have delayed AVs from operating on public roadways at scale. Our focus on industrial AVs simplifies these challenges because industrial facilities (especially those belonging to a single end customer that operates similarly at different sites) share much more in common than different cities do. Furthermore, our end customers own their infrastructure and can make changes more easily than governments can on public roadways.

With these challenges in mind, we have developed an Enterprise Autonomy Suite ("EAS") that leverages advanced in-vehicle autonomous driving technology and incorporates leading supporting technologies like data analytics, asset tracking, fleet management, cloud, and connectivity. EAS provides a differentiated solution that we believe drives pervasive proliferation of industrial autonomy and creates value for customers at every stage of their journey towards full automation and the adoption of Industry 4.0.

EAS is a suite of technologies and tools that we divide into three complementary categories:

1. *DriveMod*, our modular industrial vehicle autonomous driving software;

2. *Cyngn Insight*, our customer-facing tool suite for monitoring and managing AV fleets and generating/aggregating/analyzing data (including the Infinitracker asset tracker and IoT gateway device); and

3. *Cyngn Evolve*, our internal tool suite and infrastructure that facilitates artificial intelligence (“AI”) and machine learning (“ML”) training to continuously enhance our algorithms and models and provides a simulation framework (both record/rerun and synthetic scenario creation) to ensure that data collected in the field can be applied to validating new releases.

Legacy automation providers manufacture specialized industrial vehicles with integrated robotics software for rigidly defined tasks, limiting automation to narrow uses. Unlike these specialized vehicles, EAS can be compatible with the existing vehicle assets in addition to new vehicles that have been purpose built for autonomy by vehicle manufacturers. EAS is operationally expansive, vehicle agnostic, and compatible with indoor and outdoor environments. By offering flexible autonomous services, we aim to remove barriers to industry adoption.

We understand that scaling of autonomy solutions will require an ecosystem made up of different technologies and services that are enablers for AVs. Our approach is to forge strategic collaborations with complementary technology providers that accelerate AV development and deployment, provide access to new markets, and create new capabilities. Our focus on designing DriveMod to be modular will combine with our experience deploying AV technology on diverse industrial vehicle form factors, which will be difficult for competitors to replicate.

We expect our technology to generate revenue through two main methods: deployment and EAS subscriptions. Deploying our EAS requires us and our integration partners to work with a new client to map the job site, gather data, and install our AV technology within their fleet and site. We anticipate that new deployments will yield project-based revenues based on the scope of the deployment. After deployment, we expect to generate revenues by offering EAS through a Software as a Service (“SaaS”) model, which can be considered the AV software component of Robotics as a Service (“RaaS”).

RaaS is a subscription model that allows customers to use robots/vehicles without necessarily purchasing the hardware assets upfront. We will seek to achieve sustained revenue growth largely from ongoing SaaS-style EAS subscriptions that enable companies to tap into our ever-expanding suite of AV and AI capabilities as organizations transition into full industrial autonomy.

Although both the components and the combined solutions of EAS are still under development, EAS has already been used for a paid customer deployment as well as for paid trial and pilot deployments. We have not yet derived any significant recurring revenues from EAS but began marketing EAS to customers in 2022 with our first commercial deployment commencing in the first quarter of 2023. We expect EAS to continually be developed and enhanced according to evolving customer needs, which will take place concurrently while other completed features of EAS are commercialized. We expect annual R&D expenditures in the foreseeable future to exceed that of 2022. We also expect that limited paid deployments in 2023 will offset some of the ongoing R&D costs of continually developing EAS. We target scaled deployments to begin in 2024.

Our go-to-market strategy is to acquire new customers that use industrial vehicles in their mission-critical and daily operations by (a) leveraging the relationships and existing customers of our network of strategic partners, (b) bringing AV capabilities to industrial vehicles as a software service provider, and (c) executing a robust in-house sales and marketing effort to nurture a pipeline of industrial organizations. Our focus is on acquiring new customers who are either looking (a) to embed our technology into their vehicle product roadmaps or (b) to apply autonomy to existing fleets with our vehicle retrofits. In turn, our customers are any organizations that could utilize our EAS solution, including original equipment manufacturers (“OEMs”) that supply industrial vehicles, end customers that operate their own industrial vehicles, or service providers that operate industrial vehicles for end customers.

As OEMs and leading industrial vehicle users seek to increase productivity, reinforce safer working environments, and scale their operations, we believe we are uniquely positioned to deliver a dynamic autonomy solution via our EAS to a wide variety of industrial uses. Our long-term vision is for EAS to become a universal autonomous driving solution with minimal marginal cost for companies to adopt new vehicles and expand their autonomous fleets across new deployments. We have already deployed DriveMod software on more than 10 different vehicle form factors that range from stockchasers and forklifts to 14-seat shuttles and 5-meter-long cargo vehicles, demonstrating the extensibility of our AV building blocks.

Our strategy upon establishing a customer relationship with an OEM is to seek to embed our technology into their vehicle roadmap and expand our services to their clients. Once we solidify an initial AV deployment with a customer, we intend to seek to expand within the site to additional vehicle platforms and/or expand the use of similar vehicles to other sites operated by the customer. This "land and expand" strategy can repeat iteratively across new vehicles and sites and is at the heart of why we believe industrial AVs that operate in constrained environments are poised to create value.

Meanwhile, according to the "Money Pit: Self-Driving Cars' $16 Billion Cash Burn" article by The Information, more than $16 billion has been invested into passenger AV development during the last several years (as of 2020) with negligible revenues generated and frequent delays. The $200 billion annual industrial equipment market (projected by 2027) is substantial, but it does not justify billions of dollars of annual research and development spend. These leading passenger AV companies will need to take the approach of first capturing the trillion-dollar markets of passenger AV to achieve their desired returns.

Recent Developments

Stock Dividend

On October 2, 2023, we declared a special one-time stock dividend of 10% on the Company's common stock to shareholders of record on October 23, 2023, which was paid on October 30, 2023. The Company issued an aggregate of 3,572,978 shares of common stock to its shareholders and warrant holders and the weighted-average exercise price per share of an aggregate of 7,236,776 outstanding warrants to purchase shares of common stock of the Company was adjusted from $3.12 to $2.82.

Shares Authorized

On November 7, 2023, the shareholders of the Company approved the filing of a certificate of amendment to the Fifth Amended and Restated Certificate of Incorporation to increase the authorized shares of common stock from 100,000,000 to 200,000,000.

On November 7, 2023, the shareholders of the Company approved an amendment to the Company's 2021 Equity Incentive Plan (the "2021 Plan") to increase the number of shares authorized for issuance by 5,000,000 shares of common stock and to allow an annual increase to the 2021 Plan equal to the least of (i) 5% of the outstanding common stock on a fully diluted basis as of the end of the Company's immediately preceding fiscal year, (ii) 2,500,000 shares, or (iii) a lesser amount as determined by the Board. As of September 30, 2023, a total of 12,000,000 shares of common stock was authorized under the 2021 Plan, with the total shares increased to 17,000,000 of common stock as approved by the Company's shareholders.

ATM

As of November 7, 2023, the Company has sold 2,370,904 additional shares under the ATM Sales Agreement, for net proceeds of $770,092 after payment of commission and fees of $15,716.

Critical Accounting Policies and Estimates and Judgements

Our consolidated financial statements are prepared in accordance with accounting principles generally accepted in the United States and SEC regulations. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets and liabilities, disclosure of contingent liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. We continually evaluate our estimates and judgments. We base our estimates and judgments on historical experience and other factors that we believe to be reasonable under the circumstances. Materially different results can occur as circumstances change and additional information becomes known. Besides the estimates identified below that are considered critical, we make many other accounting estimates in preparing our financial statements and related disclosures. All estimates, whether or not deemed critical, affect reported amounts of assets, liabilities, revenues and expenses, as well as disclosures of contingent liabilities. These estimates and judgments are also based on historical experience and other factors that are believed to be reasonable under the circumstances. Materially different results can occur as circumstances change and additional information becomes known, even for estimates and judgments that are not deemed critical.

The Company considers capitalized software, warrants and share-based compensation to be critical accounting estimates and believes the associated assumptions and estimates to have the greatest potential impact on our consolidated financial statements.

Costs to Develop Software

The Company incurs costs related to software internally developed. Based on the nature of the software the Company capitalizes software costs under the following guidance.

Internal-Use Software

The Company capitalizes certain costs related to internal-use software, primarily consisting of direct labor and third-party vendor costs associated with creating the software. Software development projects generally include three stages: the preliminary project stage (all costs are expensed as incurred), the application development stage (certain costs are capitalized and certain costs are expensed as incurred) and the post-implementation/operation stage (all costs are expensed as incurred). Costs capitalized in the application development stage include costs related to the design and implementation of the selected software components, software build and configuration infrastructure, and software interfaces. Capitalization of costs requires judgment in determining when a project has reached the application development stage, the proportion of time spent in the application development stage, and the period over which the Company expect to benefit from the use of that software. Once the software is placed in service, these costs are amortized on the straight-line method over the estimated useful life of the software, which is generally three to five years. There is judgment involved in the determination of the useful life. Internal-use software is classified as property and equipment in accordance with ASC 350.

Costs to develop software to be sold, leased or otherwise marketed

The Company accounts for research costs of computer software to be sold, leased or otherwise marketed as expense until technological feasibility has been established for the product. Once technological feasibility is established, all software costs are capitalized until the product is available for general release to customers. Judgment is required in determining when technological feasibility of a product is established. We have determined that technological feasibility for our software products is reached shortly after a working prototype is complete and meets or exceeds design specifications including functions, features, and technical performance requirements. After technological feasibility is established, judgement is required to determine the amount of payroll and stock-based compensation costs to be capitalized on the remaining development efforts. . These costs will continue to be capitalized until such time as when the product or enhancement is available for general release to customers. Computer software to be sold, leased or otherwise marketed is classified as an intangible asset in accordance with ASC 985.

Warrants

The Company issued to its lead underwriter in the Company's initial public offering consummated in October 2021, (the "IPO") warrants to purchase up to 140,000 shares of its common stock, exercisable at a price per share of $9.373 and expiring on October 19, 2026. Additionally, in connection with the Private Placement offering completed on April 29, 2022, the Company issued warrants to purchase 6,451,613 shares of its common stock, exercisable at a price per share of $2.98 and expiring on April 29, 2027. The Company accounts for warrants in accordance with ASC 480, "Distinguishing Liabilities from Equity", depending on the specific terms of the warrant agreement. The Company determined the fair value of the warrants using the Black-Scholes pricing model and treated the warrants as equity instruments in consideration of the cashless settlement provisions in the warrant agreement.

The Company also applied the guidance in ASC 340-10-S99-1, “Other Assets and Deferred Costs”, which states specific incremental costs directly attributable to a proposed or actual offering of equity securities may properly be deferred and charged against the gross proceeds of the offering. The Company treated the valuation of the warrants as directly attributable to the issuance of an equity contract and, accordingly, classified the warrants as additional paid-in capital.

Stock-based Compensation

The Company recognizes the cost of share-based awards granted to employees and directors based on the estimated grant-date fair value of the awards. Cost is recognized on a straight-line basis over the service period, which is generally the vesting period of the award. The Company recognizes stock-based compensation cost and reverses previously recognized costs for unvested awards in the period forfeitures occur. The Company determines the fair value of stock options using the Black-Scholes option pricing model, which is impacted by the fair value of common stock, expected price volatility of common stock, expected term, risk-free interest rates, and expected dividend yield.

Results of Operations

Revenue

We currently derive revenue from three sources. First, we enter into fixed-price NRE contracts related to trial projects that consist of several independent phases and include design, data gathering, hardware installation on an industrial vehicle, customer-specific configuration of the DriveMod software, and demonstrations. The determination of the contract price is based on labor and hardware costs estimated to achieve the required milestones specified in the contract. The purpose of these fully funded projects is to exhibit the feasibility of the Company’s technology offering to the customer on additional vehicle types and provide a level of confidence to encourage the customer to enter into a multi-year, commercial arrangement with the Company in the future. Revenue on these multi-phase contracts is generally recognized at the point in time when the performance obligations of each independent phase have been completed and customer acceptance has been acknowledged. Contracts often allow mutual termination without penalty. To the extent our actual costs vary from the fixed fee, we will generate more or less profit or could incur a loss.

Second, we derive revenue from EAS subscriptions. Revenue from these subscriptions is recognized monthly over the service contract life, beginning at the time that a customer acknowledges acceptance of the service.

Finally, we also sell Infinitracker, an off-the-shelf asset tracking device. Revenue on product sales is recognized at the point in time when ownership of the goods is transferred, generally at the time of shipment to the customer.

During the three months ended September 30, 2023, the Company recognized $25,210 of revenue, respectively, substantially all related to EAS.

During the nine months ended September 30, 2023, the Company recognized $1,448,961 of revenue, respectively, substantially all associated with NRE contracts.

Cost of Revenue

Cost of revenues consists primarily of direct labor and related fringe benefits for internal engineering resources costs incurred for the completion of the contracts and hardware costs.

During the three months ended September 30, 2023, the Company reported cost of revenue of $42,414 consisting primarily of deployment costs, related to personnel costs, travel expenses and associated hardware costs to specific customers.

During the nine months ended September 30, 2023, the company reported cost of revenue of $1,121,732, consisting primarily of fully burdened internal engineering development resources and hardware costs incurred for the completion of the initial phases of NRE contracts.

Research and Development

Research and development expense consist primarily of outsourced engineering services, internal engineering and development expenses, materials, labor and stock-based compensation related to development of the Company's products and services. Research and development costs incurred during NRE projects are capitalized and expensed when the associated NRE revenue is recognized. All other research and development costs are expensed as incurred.

Research and development expense for the three months ended September 30, 2023 increased by approximately $0.2 million or 7% to $2.9 million from approximately $2.7 million for the three months ended September 30, 2022. The increase is primarily attributable to the increase in personnel engaged in the research and development of our AV technology in 2023 compared to headcount levels in 2022, including provisions for non-cash stock-based compensation expense, and external R&D contractors. The Company plans to continue to expand its level of engineering and other R&D personnel to support its research and development efforts and expects to continue to capitalize personnel costs for developed software through the second half of 2024.

Research and development expense for the nine months ended September 30, 2023 increased by $3.0 million or 46% to approximately $9.7 million from approximately $6.7 million for the nine months ended September 30, 2022. The increase is primarily attributable to the increase in personnel engaged in the research and development of our AV technology in 2023 compared to headcount levels in 2022, including provisions for non-cash stock-based compensation expense, and external R&D contractors. The Company plans to continue to expand its level of engineering and other R&D personnel to support its research and development efforts and expects research and development costs to increase over time.

General and Administrative

General and administrative expense consist primarily of personnel costs, facilities expenses, depreciation and amortization, travel, and advertising costs.

General and administrative expenses increased by approximately $0.1 million or 4% to approximately $2.6 million for the three months ended September 30, 2023 from approximately $2.5 million for the three months ended September 30, 2022. The increase was attributed to an increase in personnel related costs, including provisions for non-cash stock-based compensation expense, as the Company increased staff to support public company responsibilities, an increase in marketing and advertising expenses, an increase in legal and professional fees associated with public filings and increases in other general and administrative expenses.

General and administrative expenses increased by approximately $1.6 million or 23% to approximately $8.7 million for the nine months ended September 30, 2023 from $7.0 million for the nine months ended September 30, 2022. The increase was attributed to an increase in personnel related costs, including provisions for non-cash stock-based compensation expense, as the Company increased staff to support public company responsibilities, an increase in marketing and advertising expenses, an increase in legal and professional fees associated with public filings and increases in other general and administrative expenses.

Interest income (expense), net

Interest income (expense) increased by $28,228 to $32,905 for the three months ended September 30, 2023 from $4,677 for the three months ended September 30, 2022. Interest income consists primarily of interest earned of $38,220 from the Company's interest-bearing bank accounts.

Interest income (expense) increased by $96,007 to $98,698 for the nine months ended September 30, 2023 from $2,691 for the nine months ended September 30, 2022. Interest income consists primarily of interest earned of $105,028 from the Company's interest-bearing bank accounts.

Other Income

Other income increased by $90,988 to $105,284 for the three months ended September 30, 2023 from $14,296 for the three months ended September 30, 2022. Other income consists primarily of realized gains earned on the Company's short-term investments.

Other income increased by $380,760 to $397,616 for the nine months ended September 30, 2023 from $16,856 for the nine months ended September 30, 2022. Other income consists primarily of realized gains earned on the Company's short-term investments.

Liquidity and Capital Resources

The Company's principal source of liquidity is its cash and current maturities of short-term investments. Short-term investments consist of placements in U.S. government securities with original maturities between three to nine months. As of September 30, 2023, the Company had unrestricted cash of approximately $3.5 million and short-term investments of approximately $4.6 million. As of December 31, 2022, the Company had unrestricted cash of approximately $10.5 million and short-term investments of approximately $12.1 million. On April 29, 2022, the Company received net proceeds of approximately $18.1 million from the sale of common stock and exercise of pre-funded warrants in a private placement offering.

On May 31, 2023, the Company entered into an ATM Sales Agreement with Virtu Americas LLC (the "ATM Sales Agreement"), under which the Company may, from time to time, sell shares of the Company's common stock at market prices by methods deemed to be an "at-the-market offering" as defined in Rule 415 promulgated under the Securities Act of 1933, as amended. The ATM Sales Agreement and related prospectus is limited to sales of up to an aggregate maximum of $8.8 million of shares of the Company's common stock. The Company pays Virtu Americas LLC up to 3.0% of the gross proceeds as a commission. As of September 30, 2023, a total of 1,360,620 shares of common stock were sold through Virtu Americas LLC under the ATM Sales Agreement for net proceeds of $1,012,971 after payment of commission fees of $21,051 and other related expenses of $25,000. As of September 30, 2023, the Company had $7.7 million of common stock remaining available for sale under the ATM Sales Agreement.

The Company's liquidity is based on its ability to enhance its operating cash flow position, obtain capital financing from equity interest investors and borrow funds to fund its general operations, research and development activities and capital expenditures. The Company's ability to continue as a going concern is dependent on management's ability to successfully execute its business plan, which includes increasing revenue while controlling operating costs and expenses and obtaining funds from outside sources of financing to generate positive financing cash flows.

Based on cash flow projections from operating and financing activities and the existing balance of cash and short-term investments, management is of the opinion that the Company has insufficient funds for sustainable operations, and it may not be able to meet its payment obligations from operations and related commitments, if the Company is not able to complete the required funding transactions to allow the Company to continue as a going concern, for the next year. Based on these factors, the Company has substantial doubt it will continue as a going concern for the 12 months following the date that these interim financial statements were issued. These consolidated financial statements do not include any adjustments to reflect the possible future effects on the recoverability and classification of assets and liabilities that may result in the Company not being able to continue as a going concern.

<u>Cash Flows</u>

Operating activities

Net cash used in operating activities for the nine months ended September 30, 2023 was approximately $14.4 million, an increase of approximately $2.8 million or 24% compared to approximately $11.6 million for the nine months ended September 30, 2022. The increase is primarily attributed to the level of increases in personnel costs and professional services related to the Company's research and development activities, as well as increases in general and administrative personnel-related costs and professional services as the Company continues to grow, both of which led to the increase in the Company's net loss for the period.

Investing activities

Net cash provided by investing activities for the nine months ended September 30, 2023 was approximately $6.4 million, an increase of approximately $29.4 million compared to net cash used in investing activities of approximately $23.0 million for the nine months ended September 30, 2022. The increase consists of additional investment maturities of $19.9 million, which were offset by purchases of short-term investments of approximately $10.0 million and approximately $0.5 million in purchases of R&D-related hardware equipment, acquisition of intangible asset and capitalization of software.

Financing activities

Cash provided by financing activities for the nine months ended September 30, 2023 was $1.0 million, which consisted of proceeds from the sale of common stock. Cash provided by financing activities for the nine months ended September 30, 2022 was $18.1 million, which consisted of proceeds from the sale of the private placement offering.

Emerging Growth Company Status

We are an "emerging-growth company", as defined in the JOBS Act, and, for as long as we continue to be an emerging growth company, we may choose to take advantage of exemptions from various reporting requirements applicable to other public companies but not to emerging growth companies, including, but not limited to, not being required to have our independent registered public accounting firm audit our internal control over financial reporting under Section 404 of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. As an emerging growth company we can also delay adopting new or revised accounting standards until such time as those standards apply to private companies. We intend to avail ourselves of these options. Once adopted, we must continue to report on that basis until we no longer qualify as an emerging growth company.

We will cease to be an emerging growth company upon the earliest of: (i) the end of the fiscal year following the fifth anniversary of the initial public offering; (ii) the first fiscal year after our annual gross revenue are $1.07 billion or more; (iii) the date on which we have, during the previous three-year period, issued more than $1.0 billion in non-convertible debt securities; or (iv) the end of any fiscal year in which the market value of our common stock held by non-affiliates exceeded $700 million as of the end of the second quarter of that fiscal year. We cannot predict if investors will find our common stock less attractive if we choose to rely on these exemptions. If, as a result of our decision to reduce future disclosure, investors find our common shares less attractive, there may be a less active trading market for our common shares and the price of our common shares may be more volatile.

We are also a "smaller reporting company", meaning that the market value of our stock held by non-affiliates plus the aggregate amount of gross proceeds to us as a result of the IPO is less than $700 million and our annual revenue was less than $100 million during the most recently completed fiscal year. We may continue to be a smaller reporting company if either (i) the market value of our stock held by non-affiliates is less than $250 million or (ii) our annual revenue was less than $100 million during the most recently completed fiscal year and the market value of our stock held by non-affiliates is less than $700 million. If we are a smaller reporting company at the time we cease to be an emerging growth company, we may continue to rely on exemptions from certain disclosure requirements that are available to smaller reporting companies. Specifically, as a smaller reporting company we may choose to present only the two most recent fiscal years of audited financial statements in our Annual Report on Form 10-K and, similar to emerging growth companies, smaller reporting companies have reduced disclosure obligations regarding executive compensation.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Not required for smaller reporting companies.

ITEM 4. CONTROLS AND PROCEDURES

Management's Report on Disclosure Controls and Procedures

Our management, under the supervision and with the participation of our Principal Executive Officer (our Chief Executive Officer) and Principal Financial Officer (our Chief Financial Officer), has evaluated the effectiveness of our disclosure controls and procedures as of September 30, 2023. The term "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended, or 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 Securities and Exchange Commission'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 person performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

Management recognizes that any disclosure 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 September 30, 2023, our Chief Executive Officer and Chief Financial Officer have concluded that, as of such date, our disclosure controls and procedures are effective.

Changes in Internal Control over Financial Reporting

There has been no change in our internal control over financial reporting during the quarter ended September 30, 2023 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II — OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

We are not currently a party to any material legal proceedings. From time to time, we may become involved in legal proceedings arising in the ordinary course of our business. Regardless of outcome, litigation can have an adverse impact on us due to defense and settlement costs, diversion of management resources, negative publicity, reputational harm and other factors.

ITEM 1A. RISK FACTORS

Factors that could cause our actual results to differ materially from those in this Quarterly Report are any of the risks described in “Part I, Item 1A. Risk Factors” in the Form 10-K. Any of these factors could result in a significant or material adverse effect on our results of operations or financial condition. Additional risk factors not presently known to us or that we currently deem immaterial may also impair our business or results of operations.

Except as set forth below, there were no material changes to the risks and uncertainties described in the section titled “Risk Factors” in the Form 10-K during the three months ended September 30, 2023.

We are not in compliance with The NASDAQ Capital Market $1.00 minimum bid price requirement and failure to maintain compliance with this standard could result in delisting and adversely affect the market price and liquidity of our common stock.

Our common stock is currently traded on The NASDAQ Capital Market under the symbol “CYN”. If we fail to meet any of the continued listing standards of The NASDAQ Capital Market, our common stock will be delisted from The NASDAQ Capital Market. These continued listing standards include specifically enumerated criteria, such as a $1.00 minimum closing bid price. On August 24, 2023, we received a letter from The NASDAQ Stock Market advising that the Company did not meet the minimum $1.00 per share bid price requirement for continued inclusion on The NASDAQ Capital Market pursuant to NASDAQ Marketplace Listing Rule 5550(a)(2). To demonstrate compliance with this requirement, the closing bid price of our common stock needs to be at least $1.00 per share for a minimum of 10 consecutive business days before February 20, 2024. In order to satisfy this requirement, the Company intends to continue actively monitoring the bid price for its common stock between now and February 20, 2024 and will consider available options to resolve the deficiency and regain compliance with the minimum bid price requirement.

While we intend to regain compliance with the minimum bid price rule, there can be no assurance that we will be able to maintain continued compliance with this rule or the other listing requirements of The NASDAQ Capital Market. If we were unable to meet these requirements, we would receive another delisting notice from the Nasdaq Capital Market for failure to comply with one or more of the continued listing requirements. If our common stock were to be delisted from The NASDAQ Capital Market, trading of our common stock most likely will be conducted in the over-the-counter market on an electronic bulletin board established for unlisted securities such as the OTC Markets or in the “pink sheets.” Such a downgrading in our listing market may limit our ability to make a market in our common stock and which may impact purchases or sales of our securities.

Our management has concluded that we may not be able to continue as a going concern if we are not able to raise sufficient capital.

We have incurred net losses of $17.5 million and $13.7 million for the nine months ended September 30, 2023 and 2022, respectively. For the nine months ended September 30, 2023, we had $3.5 of cash. Based on cash flow projections from operating and financing activities and the existing balance of cash and short-term investments, management is of the opinion that the Company has insufficient funds for sustainable operations, and it may not be able to meet its payment obligations from operations and related commitments, if the Company is not able to complete raise sufficient capital or to allow the Company to continue as a going concern, for the next year. Our consolidated financial statements do not include any adjustments to reflect the possible future effects on the recoverability and classification of assets and liabilities that may result in the Company not being able to continue as a going concern.

The Company's ability to continue as a going concern is dependent on management's ability to successfully execute its business plan, which includes reducing negative operating cash flow by increasing revenue while controlling operating costs and expenses, and obtaining funds from outside sources of financing to generate positive financing cash flows.

There can be no assurance that any such measures will be successful. We currently do not generate substantial revenue from product sales. Accordingly, we expect to rely primarily on equity and/or debt financings to fund our continued operations. Our ability to raise additional funds will depend, in part, on the success of our product development activities, and other events or conditions that may affect our value or prospects, as well as factors related to financial, economic and market conditions, many of which are beyond our control. There can be no assurances that sufficient funds will be available to us when required or on acceptable terms, if at all. Even if successful in raising new capital, we could be limited in the amount of capital we raise due to investor demand restrictions placed on the amount of capital we raise or other reasons. For example, as of the filing of this Quarterly Report, we are subject to the limitations set forth in Instruction I.B.6 of Form S-3 (the "baby shelf restrictions"). Accordingly, management has concluded that these plans do not alleviate substantial doubt about the Company's ability to continue as a going concern.

If we are not successful in improving our liquidity position, we may be required to significantly delay, scale back, or discontinue the development or commercialization of our product candidates, pursue the sale of our company to a third party at a price that may result in a loss on investment for our stockholders, or file for bankruptcy or cease operations altogether. Any of these events could have a material adverse effect on our business, operating results and prospects.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES, USE OF PROCEEDS, AND ISSUER PURCHASES OF EQUITY SECURITIES

None.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

None.

ITEM 6. EXHIBITS

Exhibit Number	Description
31.1*	Certification of Principal Executive Officer pursuant to Rules 13a-14(a) and 15d-14(a) of the Securities Exchange Act, as amended.
31.2*	Certification of Principal Financial Officer pursuant to Rules 13a-14(a) and 15d-14(a) of the Securities Exchange Act, as amended.
32.1**	Certification of Principal Executive Officer and Principal Financial Officer pursuant to Rules 13a-14(b) or 15d-14(b) of the Securities Exchange Act, as amended, and 18 U.S.C. Section 1350.
101.INS	Inline XBRL Instance Document
101.SCH	Inline XBRL Taxonomy Extension Schema Document.
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document.
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document.
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document.
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document.
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101).

* Filed herewith.
** Furnished herewith.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, the Registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized, on this 8th day of November, 2023.

CYNGN INC.

/s/ Lior Tal

Lior Tal
Chief Executive Officer,
Chairman of the Board of Directors and Director
(Principal Executive Officer)

/s/ *Donald Alvarez*

Donald Alvarez
Chief Financial Officer
(Principal Financial and Accounting Officer)

Exhibit 31.1

CERTIFICATIONS OF CHIEF EXECUTIVE OFFICER
PURSUANT TO RULES 13A-14 AND 15D-14
OF THE SECURITIES EXCHANGE ACT OF 1934

I, Lior Tal, certify that:

1) I have reviewed this quarterly report on Form 10-Q of Cyngn Inc.;

2) Based on my knowledge, this quarterly 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 quarterly report;

3) Based on my knowledge, the financial statements and other financial information included in this quarterly 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 quarterly 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 quarterly 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 quarterly report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this quarterly report based on such evaluation; and

   d. Disclosed in this quarterly report any changes in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter 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 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: November 8, 2023

/s/ Lior Tal
Lior Tal
Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATIONS OF CHIEF FINANCIAL OFFICER
PURSUANT TO RULES 13A-14 AND 15D-14
OF THE SECURITIES EXCHANGE ACT OF 1934

I, Donald Alvarez, certify that:

1) I have reviewed this quarterly report on Form 10-Q of Cyngn Inc.;

2) Based on my knowledge, this quarterly 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 quarterly report;

3) Based on my knowledge, the financial statements and other financial information included in this quarterly 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 quarterly 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 quarterly 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 quarterly report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this quarterly report based on such evaluation; and

   d. Disclosed in this quarterly report any changes in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter 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 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: November 8, 2023

/s/ *Donald Alvarez*
Donald Alvarez
Chief Financial Officer
(Principal Financial and Accounting Officer)

Exhibit 32.1

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

In connection with the Quarterly Report of Cyngn Inc. (“Company”) on Form 10-Q for the quarter ending September 30, 2023, as filed with the Securities and Exchange Commission on the date hereof (“Report”), the undersigned, in the capacities and on the date indicated below, each hereby certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the knowledge of each of the undersigned:

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: November 8, 2023

/s/ Lior Tal
Lior Tal
Chief Executive Officer
(Principal Executive Officer)

/s/ Donald Alvarez
Donald Alvarez
Chief Financial Officer
(Principal Financial and Accounting Officer)