UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

FORM 10-Q

(Mark One)

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

For the quarterly period ended March 31, 2021

OR

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

Commission File Number: 001-38937

Aterian, Inc.
(Exact name of registrant as specified in its charter)

Delaware	**83-1739858**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification Number)**
37 East 18th Street, 7th Floor New York, NY	**10003**
(Address of principal executive offices)	**(Zip Code)**

(347) 676-1681
(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, $0.0001 par value per share	ATER	The Nasdaq Stock Market LLC

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

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

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

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

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

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

As of May 3, 2021, the registrant had 30,624,056 shares of common stock, $0.0001 par value per share, outstanding.

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Special Note Regarding Forward-Looking Statements

This Quarterly Report on Form 10-Q contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, which statements involve substantial risks and uncertainties. Forward-looking statements generally relate to future events or our future financial or operating performance. In some cases, you can identify forward-looking statements because they contain words such as "may," "will," "should," "expects," "plans," "anticipates," "could," "intends," "target," "projects," "contemplates," "believes," "estimates," "predicts," "potential," or "continue" or the negative of these words or other similar terms or expressions that concern our expectations, strategy, plans, or intentions. Forward-looking statements contained in this Quarterly Report on Form 10-Q include, but are not limited to, statements about:

- *the potential impact of the COVID-19 global pandemic on our business, revenue and financial condition, including our supply chain and our operations;*
- *our expectation that consumer spending will continue to shift online, and that such shift will continue even after the COVID-19 global pandemic ends;*
- *our future financial performance, including our revenue, costs of goods sold and operating expenses;*
- *our ability to achieve, sustain and grow profitability;*
- *the sufficiency of our cash to meet our liquidity and operational needs and to execute our growth strategies, including potential acquisitions;*
- *our ability to maintain the security and availability of our technology platform, including our AIMEE (**A**rtificial **I**ntelligence **M**arketplace **e**-Commerce **E**ngine) software platform;*
- *our ability to successfully launch new products, including our ability to successfully manage supply chain risks;*
- *our ability to identify, complete and integrate merger and acquisition transactions;*
- *our ability to successfully execute and grow net revenue and profitability from sales of personal protective equipment ("PPE");*
- *our predictions about industry and market trends;*
- *our ability to successfully expand internationally;*
- *our ability to effectively manage our growth and future expenses;*
- *our estimated total addressable market, including for potential acquisitions;*
- *our ability to maintain, protect and enhance our intellectual property, including our AIMEE software platform;*
- *our ability to comply with modified or new laws and regulations applying to our business;*
- *our ability to attract and retain key personnel;*
- *our ability to successfully defend litigation brought against us or to pursue litigation; and*
- *the increased expenses and obligations associated with being a public company.*

We caution you that the foregoing list may not contain all the forward-looking statements made in this Quarterly Report on Form 10-Q.

We have based the forward-looking statements contained in this Quarterly Report on Form 10-Q primarily on our current expectations and projections about future events and trends that we believe may affect our business, financial condition, results of operations and prospects. The outcome of the events described in these forward-looking statements is subject to risks, uncertainties and other factors described in the section of this Quarterly Report on Form 10-Q entitled "Risk Factors" and elsewhere in this Quarterly Report on Form 10-Q. Moreover, we operate in a highly competitive and challenging environment. New risks and uncertainties emerge from time to time, and it is not possible for us to predict all risks and uncertainties that could have an impact on the forward-looking statements contained in this Quarterly Report on Form 10-Q. We cannot assure you that the results, events and circumstances reflected, or that the plans, intentions or expectations disclosed, in the forward-looking statements will be achieved or occur, and actual results, events or circumstances could differ materially from those expressed or implied by the forward-looking statements.

The forward-looking statements made in this Quarterly Report on Form 10-Q relate only to events as of the date on which the statements are made. We undertake no obligation to update any forward-looking statements made in this Quarterly Report on Form 10-Q to reflect events or circumstances after the date of this Quarterly Report on Form 10-Q, new information or the occurrence of unanticipated events, except as required by law. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures, other strategic transactions or investments we may make or enter into.

PART I—FINANCIAL INFORMATION

Item 1. Financial Statements.

ATERIAN, INC.
Condensed Consolidated Balance Sheets
(Unaudited)
(in thousands, except share and per share data)

	December 31, 2020	March 31, 2021
ASSETS		
CURRENT ASSETS:		
Cash	$ 26,718	$ 34,995
Accounts receivable—net	5,747	7,192
Inventory	31,582	55,026
Prepaid and other current assets	11,111	24,577
Total current assets	75,158	121,790
PROPERTY AND EQUIPMENT—net	169	166
GOODWILL AND OTHER INTANGIBLES—net	78,778	140,473
OTHER NON-CURRENT ASSETS	3,349	3,552
TOTAL ASSETS	$ 157,454	$ 265,981
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES:		
Credit facility	$ 12,190	$ 14,319
Accounts payable	14,856	26,475
Term loan	21,600	21,600
Seller notes	16,231	10,677
Contingent earn-out liability	1,515	18,783
Accrued and other current liabilities	8,340	14,181
Total current liabilities	74,732	106,035
OTHER LIABILITIES	1,841	1,841
CONTINGENT EARN-OUT LIABILITY	21,016	35,951
TERM LOANS	36,483	83,689
Total liabilities	134,072	227,516
COMMITMENTS AND CONTINGENCIES (Note 9)		
STOCKHOLDERS' EQUITY:		
Common stock, par value $0.0001 per share—500,000,000 shares authorized and 27,074,791 shares outstanding at December 31, 2020; 500,000,000 shares authorized and 30,590,796 shares outstanding at March 31, 2021	3	3
Additional paid-in capital	216,305	313,911
Accumulated deficit	(192,935)	(275,488)
Accumulated other comprehensive income	9	39
Total stockholders' equity	23,382	38,465
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	$ 157,454	$ 265,981

See notes to condensed consolidated financial statements.

ATERIAN, INC.
Condensed Consolidated Statements of Operations
(Unaudited)
(in thousands, except share and per share data)

	Three Months Ended March 31, 2020	Three Months Ended March 31, 2021
NET REVENUE	$ 25,628	$ 48,136
COST OF GOODS SOLD	15,330	22,073
GROSS PROFIT	10,298	26,063
OPERATING EXPENSES:		
Sales and distribution	13,910	25,069
Research and development	2,281	2,124
General and administrative	8,003	10,976
Change in fair value of contingent earn-out liabilities	—	15,645
TOTAL OPERATING EXPENSES:	24,194	53,814
OPERATING LOSS	(13,896)	(27,751)
INTEREST EXPENSE—net	1,109	4,420
CHANGE IN FAIR VALUE OF WARRANT LIABILITY	—	30,202
LOSS ON INITIAL ISSUANCE OF WARRANT	—	20,147
OTHER EXPENSE	25	33
LOSS BEFORE INCOME TAXES	(15,030)	(82,553)
PROVISION FOR INCOME TAXES	—	—
NET LOSS	$ (15,030)	$ (82,553)
Net loss per share, basic and diluted	$ (0.99)	$ (3.15)
Weighted-average number of shares outstanding, basic and diluted	15,193,647	26,225,383

See notes to condensed consolidated financial statements.

ATERIAN, INC.
Condensed Consolidated Statements of Comprehensive Loss
(Unaudited)
(in thousands)

	Three Months Ended March 31, 2020	Three Months Ended March 31, 2021
NET LOSS	$ (15,030)	$ (82,553)
OTHER COMPREHENSIVE INCOME (LOSS):		
Foreign currency translation adjustments	(2)	30
Other comprehensive income (loss)	(2)	30
COMPREHENSIVE LOSS	$ (15,032)	$ (82,523)

See notes to condensed consolidated financial statements.

ATERIAN, INC.
Condensed Consolidated Statements of Stockholders' Equity
(Unaudited)
(in thousands, except share and per share data)

	Three Months Ended March 31, 2020					
	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Income/(Loss)	Total Stockholders' Equity (Deficit)
	Shares	Amount				
BALANCE—January 1, 2020	17,736,649	$ 2	$ 140,477	$ (129,809)	$ 57	$ 10,727
Net loss	—	—	—	(15,030)	—	(15,030)
Issuance of 439,145 shares of restricted common stock in March 2020 (see Note 7)	439,145	—		—	—	—
Forfeiture of 371,320 shares of restricted common stock	(371,320)					
Stock-based compensation	—	—	7,439	—	—	7,439
Shares of restricted common stock retired in connection with vesting	(40,480)		(139)			(139)
Other comprehensive loss	—	—	—	—	(2)	(2)
BALANCE—March 31, 2020	17,763,994	$ 2	$ 147,777	$ (144,839)	$ 55	$ 2,995

	Three Months Ended March 31, 2021					
	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Income	Total Stockholders' Equity
	Shares	Amount				
BALANCE—January 1, 2021	27,074,791	$ 3	$ 216,305	$ (192,935)	$ 9	$ 23,382
Net loss	—	—	—	(82,553)	—	(82,553)
Issuance of common stock upon exercise of stock option grants	978,495	—	8,749	—	—	8,749
Issuance of common stock related to exercise of warrants	1,039,960	—	40,172	—	—	40,172
Issuance of common stock in connection with acquisition of Healing Solutions assets	1,387,759	—	39,454	—	—	39,454
Issuance of restricted stock awards	109,791	—	3,427	—	—	3,427
Stock-based compensation expense	—	—	5,804	—	—	5,804
Other comprehensive loss	—	—	—	—	30	30
BALANCE—March 31, 2021	30,590,796	$ 3	$ 313,911	$ (275,488)	$ 39	$ 38,465

See notes to condensed consolidated financial statements.

ATERIAN, INC.
Condensed Consolidated Statements of Cash Flows
(Unaudited)
(in thousands)

	Three Months Ended March 31, 2020	Three Months Ended March 31, 2021
OPERATING ACTIVITIES:		
Net loss	$ (15,030)	$ (82,553)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	41	1,204
Provision for sales returns	84	(100)
Amortization of deferred financing costs and debt discounts	304	3,963
Stock-based compensation	7,439	6,899
Loss from increase of contingent liabilities fair value	—	15,645
Loss in connection with warrant fair value	—	30,202
Loss on initial issuance of warrant	—	20,147
Other	33	—
Changes in assets and liabilities:		
Accounts receivable	(3,140)	(1,445)
Inventory	(8,044)	(15,355)
Prepaid and other current assets	540	(4,675)
Accounts payable, accrued and other liabilities	682	17,573
Cash used in operating activities	(17,091)	(8,495)
INVESTING ACTIVITIES:		
Purchase of fixed assets	(18)	(20)
Purchase of Healing Solutions assets	—	(15,280)
Cash used in investing activities	(18)	(15,300)
FINANCING ACTIVITIES:		
Proceeds from warrant exercise	—	8,939
Proceeds from cancellation of warrant	—	16,957
Proceeds from exercise of stock options	(112)	8,749
Repayments on note payable to Smash	—	(4,737)
Proceeds from initial public offering, net of issuance costs	17,435	—
Repayments from MidCap credit facility	(15,414)	—
Borrowings from MidCap credit facility	—	14,531
Repayments from MidCap credit facility	—	(12,325)
Deferred financing costs from MidCap credit facility	—	(151)
Repayments for High Trail Term Loan	—	(5,400)
Borrowings from High Trail term loan note 2	—	14,025
Debt issuance costs from High Trail Term Loan	—	(1,136)
Deferred offering costs	(139)	—
Insurance obligation payments	(965)	(951)
Capital lease obligation payments	(2)	—
Cash provided by financing activities	803	38,501
EFFECT OF EXCHANGE RATE ON CASH	3	(99)
NET CHANGE IN CASH AND RESTRICTED CASH FOR PERIOD	(16,303)	14,607
CASH AND RESTRICTED CASH AT BEGINNING OF PERIOD	30,789	30,097
CASH AND RESTRICTED CASH AT END OF PERIOD	$ 14,486	$ 44,704
RECONCILIATION OF CASH AND RESTRICTED CASH		
CASH	$ 14,050	$ 34,995
RESTRICTED CASH—Prepaid and other assets	307	9,580
RESTRICTED CASH—Other non-current assets	129	129
TOTAL CASH AND RESTRICTED CASH	$ 14,486	$ 44,704
SUPPLEMENTAL DISCLOSURES OF CASH FLOW INFORMATION		
Cash paid for interest	$ 759	$ 252
Non-cash consideration paid to contractors	$ —	$ 3,427
NON-CASH INVESTING AND FINANCING ACTIVITIES:		
Debt issuance costs not paid	$ —	$ 246
Original issue discount	$ —	$ 2,475
Fair value of contingent consideration liability	$ —	$ 16,557
Discount of debt relating to warrants issuance	$ —	$ 7,740
Issuance of common stock in connection with acquisition	$ —	$ 39,454
Common stock issued for warrants	$ —	$ 1,125

See notes to condensed consolidated financial statements.

1. ORGANIZATION AND DESCRIPTION OF BUSINESS

Aterian, Inc. and its subsidiaries, formerly known as Mohawk Group Holdings, Inc, ("Aterian" or the "Company"), is a technology-enabled consumer products platform that builds, acquires and partners with e-commerce brands. The Company's proprietary software and highly agile supply chain helps creating for a growing base of data empowered e-commerce consumers. Aterian predominantly operates through online retail channels such as Amazon and Walmart, Inc. The Company owns and operates twelve brands, which were either incubated or purchased, selling products in multiple categories, including home and kitchen appliances, kitchenware, heating, cooling and air quality appliances (dehumidifiers, humidifiers and air conditioners), health and beauty products and essentials oils.

Headquartered in New York, Aterian's offices can be found in China, Philippines, Israel and Poland.

Healing Solutions Acquisition—On February 2, 2021, the Company acquired certain of Healing Solutions, LLC ("Healing Solutions") related to its retail and ecommerce business under the Healing Solutions' brands, Tarvol, Sun Essential Oils and Artizen (among others), which primarily sells essential oils primarily through Amazon and other marketplaces (see Note 10).

COVID-19 Pandemic—On January 30, 2020, the World Health Organization (the "WHO") announced a global health emergency because of a new strain of coronavirus ("COVID-19") originating in Wuhan, China and the risks to the international community as the virus spreads globally beyond its point of origin. In March 2020, the WHO classified COVID-19 as a pandemic, based on the rapid increase in exposure globally. The full impact of the COVID-19 pandemic, including the impact associated with preventative and precautionary measures that the Company, other businesses and governments are taking, continues to evolve as of the date of this report. As such, the future impact on the Company's personnel, business and global operations, and on the Company's suppliers, logistics providers, marketplaces and other business partners is uncertain and cannot be reasonably estimated at this time. Given the nature of the COVID-19 pandemic, it is possible that any and every aspect of the Company's value chain could be disrupted, and such impact could have a material adverse impact on the Company's business, financial condition, operating results and prospects. For example, with respect to certain products, the Company has been unable to replenish inventory or, ship into or receive inventory in its third-party warehouses, in each case on a timely basis. Further, in certain instances of the Company has had to delay the launch of new products due to sourcing and other supply chain constraints. The Company may also be unable to forecast demand for its products during the pendency of this pandemic and the Company may experience a substantial decrease in the demand for its products, most of which are considered not essential. In addition, the majority of the Company's personnel are currently working remotely, which creates challenges in the way the Company operates its business, including, but not limited to, the manner in which the Company tests products and its ability to meet its reporting obligations. The Company's ability to execute its operations could be further impacted if any of the Company's key personnel contracts COVID-19. While the potential economic impact brought by, and the duration of, COVID-19 may be difficult to assess or predict, the continued widespread pandemic could result in significant disruption of global financial markets, reducing the Company's ability to access capital, which could in the future negatively affect its liquidity. Due to the uncertainty as to the severity and duration of the pandemic, the impact on the Company's future revenues, profitability, liquidity, financial condition, business and results of operations is uncertain at this time.

The COVID-19 pandemic began to have an unfavorable impact on the Company, including its key manufacturing partners, in January 2020. Substantially all of the Company's products are sourced and manufactured in China, including new products that the Company expects to launch during 2021. In addition, the Company relies on its team in Shenzhen for a number of functions relating to product sourcing and development, among other things. The Company's key manufacturing partner in China re-opened its facilities as of February 10, 2020 and reached and maintained over 90% capacity since early March 2020.

During the second quarter of 2020, the Company preserved its liquidity and capital resources through various actions, which included delaying and negotiating the delay of payments to certain vendors, and the effect of such actions did not have an adverse impact on the Company's business, including its relationships with these vendors. The Company's operations rely on third-parties to manufacture its products, to provide logistics and warehousing services and to facilitate sales of its products, and accordingly the Company relies on the business continuity plans of these third parties to operate during the pandemic and has limited ability to influence their plans.

To date the Company has had few material overall negative impacts to its business and operations from the COVID-19 pandemic. The Company has seen 87.8% growth in its net revenue for the quarter ended March 31, 2021 versus the corresponding period of the prior year. The shift of consumer spending from traditional retail to online spending has increased dramatically due to the COVID-19 pandemic. This has benefited the Company as historically over 90% of its net revenue comes from the sale of products online in the

U.S. and it believes this shift to increased online consumer spending will continue even after the COVID-19 pandemic ends. The Company's investments in its infrastructure and software and the expansion of its third-party warehousing network have also allowed the Company to continue to deliver its products, even when Amazon itself limited its delivery services. The Company has had no material impacts to its vendor or other business relationships to date and in certain circumstances it has been able to negotiate improved credit and other terms. Further, to date, none of the Company's key operations vendors has had any material negative impacts related to COVID-19 or changes that have negatively affected the Company's business, borrowing capabilities or financial covenants. During the first quarter of 2021, we have experienced some impacts to our margins as it relates to increased international freight demands, lack of ship containers and general international freight congestion due to the continued increase demand of goods being sold on ecommerce marketplaces. Further, we expect to see increases in last mile shipping costs as shipping providers continue to see increased demand due to the increase of goods sold on ecommerce marketplaces which stresses their delivery networks. We believe these short-term increases in cost to be primarily related to COVID-19 pandemic. Though the COVID-19 pandemic is fluid, the Company believes at this time that its business may continue to minimize the impact from this current pandemic given the Company's ability to work remotely, continued consumer demand for products on e-commerce channels and the business continuity plans of its key manufacturing partners and other vendors. The Company believes this combination of factors may help to mitigate risk from the COVID-19 pandemic.

The Company continues to consider the impact of COVID-19 on the assumptions and estimates used when preparing these consolidated financial statements including inventory valuation, and the impairment of long-lived assets. These assumptions and estimates may change as the current situation evolves or new events occur and additional information is obtained. If the economic conditions caused by COVID-19 worsen beyond what is currently estimated by management, such future changes may have an adverse impact on the Company's results of operations, financial position, and liquidity.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation—The accompanying unaudited condensed consolidated financial statements have been prepared by the Company in accordance with generally accepted accounting principles in the United States ("GAAP") for interim financial reporting and as required by Rule 10-01 of Regulation S-X. Certain information and note disclosures normally included in the annual financial statements prepared in accordance with GAAP have been condensed or omitted pursuant to such rules and regulations. The condensed consolidated balance sheet as of December 31, 2020 included herein was derived from the Company's audited consolidated financial statements as of that date. As such, the information included in this Quarterly Report on Form 10-Q should be read in conjunction with the audited consolidated financial statements and the related notes thereto as of and for the year ended December 31, 2020, included in the Company's Annual Report on Form 10-K filed with the Securities and Exchange Commission, on March 16, 2021 (the "Annual Report").

In the opinion of the Company's management, the accompanying unaudited condensed consolidated financial statements contain all adjustments (consisting of items of a normal and recurring nature) necessary to present fairly the financial position as of March 31, 2021, the results of operations for the three months ended March 31, 2020 and 2021, the statements of stockholders' equity for the three months ended March 31, 2020 and 2021, and cash flows for the three months ended March 31, 2020 and 2021. The results of operations for the three months ended March 31, 2021 are not necessarily indicative of the results to be expected for the full year.

Use of Estimates— Preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period covered by the financial statements and accompanying notes. Management evaluates its estimates and assumptions on an ongoing basis using historical experience and other factors, including the current economic environment, and makes adjustments when facts and circumstances dictate. As future events and their effects cannot be determined with precision, actual results could differ from those estimates.

Principles of Consolidation— The condensed consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. All inter-company balances and transactions have been eliminated in consolidation.

Restricted Cash— The Company has restricted cash with its primary banks for use as required minimum restricted capital for its Chinese subsidiary. As of December 31, 2020, the Company has classified the following as restricted cash: $0.1 million related to its Chinese subsidiary within "current assets" on the condensed consolidated balance sheets and $3.3 million related to a returned deposit for inventory that a manufacturer required the Company to pay into an escrow account within "prepaid and other current assets" on the condensed consolidated balance sheet.

As of March 31, 2021, the Company has classified the following as restricted cash: $0.1 million related to its Chinese subsidiary and $0.3 million related to a letter of credit within "other non-current assets" on the condensed consolidated balance sheets, and $9.3 million related to a returned deposit for inventory that a manufacturer required the Company to pay into an escrow account within "prepaid and other current assets" on the condensed consolidated balance sheets.

Revenue Recognition—The Company accounts for revenue in accordance with Financial Accounting Standards Board ("FASB") Accounting Standard Codification ("ASC") Topic 606, *Revenue from Contracts with Customers*.

The Company derives its revenue from the sale of consumer products. The Company sells its products directly to consumers through online retail channels and through wholesale channels.

Net Revenue by Category. The following table sets forth the Company's net revenue disaggregated by sales channel and geographic region based on the billing addresses of its customers:

	Three Months Ended March 31, 2020 (in thousands)			
	Direct	Wholesale	Managed PaaS	Total
North America	$ 25,173	$ 59	$ 361	$ 25,593
Other	35	—	—	35
Total net revenue	$ 25,208	$ 59	$ 361	$ 25,628

	Three Months Ended March 31, 2021 (in thousands)			
	Direct	Wholesale	Managed PaaS	Total
North America	$ 46,142	$ 1,802	$ 182	$ 48,126
Other	10	—	—	10
Total net revenue	$ 46,152	$ 1,802	$ 182	$ 48,136

Net Revenue by Product Categories. The following table sets forth the Company's net revenue disaggregated by product categories:

	Three Months Ended March 31,	
	2020	2021
	(in thousands)	
Heating, cooling and air quality	$ 9,877	$ 6,138
Kitchen appliances	7,025	12,150
Health and beauty	4,430	3,642
Personal protective equipment	—	1,154
Cookware, kitchen tools and gadgets	994	6,098
Home office	498	809
Housewares	1,412	7,182
Essential oils and related accessories	—	7,353
Other	1,031	3,428
Total net product revenue	25,267	47,954
PaaS	361	182
Total net revenue	$ 25,628	$ 48,136

Fair Value of Financial Instruments—The Company's financial instruments, including net accounts receivable, accounts payable, and accrued and other current liabilities are carried at historical cost. At March 31, 2021, the carrying amounts of these instruments approximated their fair values because of their short-term nature. The Company's credit facility is carried at amortized cost at December 31, 2020 and March 31, 2021 and the carrying amount approximates fair value as the stated interest rate approximates market rates currently available to the Company. The Company considers the inputs utilized to determine the fair value of the borrowings to be Level 2 inputs.

The Company considers the inputs utilized to determine the fair value of the borrowings to be Level 3 inputs. The Company categorizes its warrants potentially settleable in cash as Level 3 fair value measurements. The warrants potentially settleable in cash are measured at fair value on a recurring basis and are being marked to fair value at each reporting date until they are completely settled or meet the requirements to be accounted for as component of stockholders' equity.

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

Level 1—Inputs are unadjusted, quoted prices in active markets for identical assets or liabilities at the measurement date;

Level 2—Inputs are observable, unadjusted quoted prices in active markets for similar assets or liabilities, unadjusted quoted prices for identical or similar assets or liabilities 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 related assets or liabilities; and

Level 3—Unobservable inputs that are supported by little or no market data for the related assets or liabilities.

The categorization of a financial instrument within the valuation hierarchy is based upon the lowest level of input that is significant to the fair value measurement. The following table summarizes the fair value of the Company’s financial assets that are measured at fair value as of December 31, 2020 and March 31, 2021 (in thousands):

	December 31, 2020		
	Fair Value Measurement Category		
	Level 1	Level 2	Level 3
Assets:			
Cash and cash equivalents	$ 26,718	$ —	$ —
Restricted cash	3,379	—	—
Liabilities:			
Fair market value of warrant liability	—	—	31,821
Estimated fair value of contingent earn-out considerations	—	—	22,531

	March 31, 2021		
	Fair Value Measurement Category		
	Level 1	Level 2	Level 3
Assets:			
Cash and cash equivalents	$ 34,995	$ —	$ —
Restricted cash	9,773	—	—
Liabilities:			
Fair market value of warrant liability	—	—	75,634
Estimated fair value of contingent earn-out considerations	—	—	54,734

Recent Accounting Pronouncements

The Jumpstart Our Business Startups Act of 2012 (the “JOBS Act”) permits an emerging growth company to take advantage of an extended transition period to comply with new or revised accounting standards applicable to public companies. The Company has elected to use this extended transition period until it is no longer an emerging growth company or until it affirmatively and irrevocably opts out of the extended transition period. As a result, the Company’s financial statements may not be comparable to companies that comply with new or revised accounting pronouncements as of public company effective dates.

Recently Issued Accounting Pronouncements

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)* (“ASU 2016-02”). This ASU requires lessees to record most leases on their balance sheets but recognize the expenses on their income statements in a manner similar to current practice. ASU 2016-02 states that a lessee would recognize a lease liability for the obligation to make lease payments and a right-to-use asset for the right to use the underlying asset for the lease term. In July 2019, the FASB delayed the effective date for this ASU for private companies (including emerging growth companies) and it will be effective for annual reporting periods beginning after December 15, 2021, with early adoption permitted. While the Company has not completed its evaluation of the impact of adoption of this standard, the Company does not expect it to have a material impact on its condensed consolidated financial statements.

In June 2016, the FASB issued *ASU 2016-13: Financial Instruments – Credit Losses (Topic 326).* This ASU requires the use of an expected loss model for certain types of financial instruments and requires consideration of a broader range of reasonable and supportable information to calculate credit loss estimates. For trade receivables, loans and held-to-maturity debt securities, an estimate of lifetime expected credit losses is required. For available-for-sale debt securities, an allowance for credit losses will be required rather than a reduction to the carrying value of the asset. In July 2019, the FASB delayed the effective date for this ASU for private companies (including emerging growth companies) and will be effective for annual reporting periods beginning after December 15, 2022, with early adoption permitted. While the Company has not completed its evaluation of the impact of adoption of this standard, the Company does not expect it to have a material impact on its condensed consolidated financial statements.

In December 2019, the FASB issued *ASU 2019-12, Income Taxes*. This ASU provides for certain updates to reduce complexity in accounting for income taxes, including the utilization of the incremental approach for intra-period tax allocation, among others. This standard is effective for fiscal years beginning after December 15, 2021, and for interim periods beginning after December 15, 2022 with early adoption permitted. While the Company has not completed its evaluation of the impact of adoption of this standard, the Company does not expect it to have a material impact on its condensed consolidated financial statements.

In August 2018, the FASB issued *ASU No. 2018-15, "Customer's Accounting for Implementation Cost Incurred in a Cloud Computing Arrangement That Is a Service Contract"* ("ASU 2018-15"). Under the new guidance, customers apply the same criteria for capitalizing implementation costs as they would for an arrangement that has a software license. This will result in certain implementation costs being capitalized; the associated amortization charge will, however, be recorded as an operating expense. Under the previous guidance, costs incurred when implementing a cloud computing arrangement deemed to be a service contract were recorded as an operating expense when incurred. ASU 2020-06 will be effective for fiscal years beginning after December 15, 2021, including interim periods within those fiscal years. Early adoption is permitted. While the Company has not completed its evaluation of the impact of adoption of this standard, the Company does not expect it to have a material impact on its condensed consolidated financial statements.

In August 2020, the FASB issued *ASU No. 2020-06, "Debt—Debt with Conversion and Other Options (Topic 470) and Derivatives and Hedging—Contracts in Entity's Own Equity (Topic 814): Accounting for Convertible Instruments and Contracts in an Entity's Own Equity"* ("ASU 2020-06"). ASU 2020-06 eliminates the number of accounting models used to account for convertible debt instruments and convertible preferred stock. The update also amends the disclosure requirements for convertible instruments and EPS in an effort to increase financial reporting transparency. ASU 2020-06 will be effective for fiscal years beginning after December 15, 2021, including interim periods within those fiscal years. Early adoption is permitted. While the Company has not completed its evaluation of the impact of adoption of this standard, the Company does not expect it to have a material impact on its condensed consolidated financial statements.

3. INVENTORY

Inventory consisted of the following as of December 31, 2020 and March 31, 2021:

	December 31, 2020	March 31, 2021
	(in thousands)	
Inventory on-hand	$ 22,753	$ 39,235
Inventory in-transit	8,829	15,791
Inventory	$ 31,582	$ 55,026

The Company's Inventory on-hand is held either with Amazon or the Company's other third-party warehouses. The Company does not have any contractual right of returns with its contract manufacturers. The Company's Inventory on-hand held by Amazon was approximately $5.3 million and $10.5 million as of December 31, 2020 and March 31, 2021, respectively.

4. PREPAID EXPENSES AND OTHER CURRENT ASSETS

Prepaids and other current assets consisted of the following as of December 31, 2020 and March 31, 2021:

	December 31, 2020	March 31, 2021
	(in thousands)	
Prepaid inventory	$ 4,361	$ 10,055
Restricted cash	3,250	9,344
Prepaid insurance	1,504	765
Other	1,996	4,413
Prepaid and other current assets	$ 11,111	$ 24,577

5. ACCRUED AND OTHER CURRENT LIABILITIES

Accrued expenses and other current liabilities consisted of the following as of December 31, 2020 and March 31, 2021:

	December 31, 2020	March 31, 2021
	(in thousands)	
Accrued compensation costs	$ 293	$ 112
Accrued professional fees and consultants	483	1,861
Accrued logistics costs	1,068	2,978
Product related accruals	3,221	2,951
Sales tax payable	457	564
Sales return reserve	547	448
Accrued recall liability	22	22
Insurance financing	476	—
Withholding tax	—	3,168
All other accruals	1,773	2,077
Accrued and other current liabilities	$ 8,340	$ 14,181

The Company sponsors, through its professional employer organization provider, a 401(k) defined contribution plan covering all eligible US employees. Contributions to the 401(k) plan are discretionary. Currently, the Company does not match or make any contributions to the 401(k) plan.

6. CREDIT FACILITY AND TERM LOANS

The Company's credit facility consisted of the following as of December 31, 2020 and March 31, 2021:

	December 31, 2020	March 31, 2021
	(in thousands)	
MidCap Credit Facility	$ 12,905	$ 15,085
Less: deferred debt issuance costs	(702)	(757)
Less: discount associated with issuance of warrants	(13)	(9)
Total MidCap Credit Facility	$ 12,190	$ 14,319

MidCap Credit Facility and Term Loan

On November 23, 2018, the Company entered into the three-year $25.0 million revolving credit facility (the "Credit Facility") with MidCap Funding IV Trust ("MidCap") as agent and lenders party thereto (the "Lenders"). The Credit Facility could be increased, subject to certain conditions, to $50.0 million. Loans under the Credit Facility were determined based on percentages of the Company's eligible accounts receivable and eligible inventory. The Credit Facility bore interest at a rate of the London Interbank Offered Rate ("LIBOR") plus 5.75% for outstanding borrowings. The Company was required to pay a facility availability fee of 0.5% on the average unused portion of the Credit Facility.

On December 1, 2020, the Company, certain of the Company's subsidiaries and MidCap entered into an amendment to the Credit Facility, (i) providing for a $30.0 million revolving credit facility, which could be increased, subject to certain conditions, to $50.0 million, (ii) permitting the incurrence of certain debt under certain conditions and restrictions, including the senior secured note with an aggregate principal amount of $43.0 million issued on December 1, 2020 (as amended, the "December 2020 Note"), (iii) permitting certain payments to High Trail Investments SA LLC ("High Trail SA") as required under the December 2020 Note, and (iv) permitting the acquisition of the assets of an e-commerce business under the brands Mueller, Pursteam, Pohl and Schmitt, and Spiralizer (the "Smash Assets"). Further, the Credit Facility was extended to November 23, 2022.

The Credit Facility contained a minimum liquidity financial covenant that required the Company to maintain a minimum of $6.5 million in cash on hand or availability in the Credit Facility. The Company was in compliance with the financial covenants contained within the Credit Facility as of December 31, 2020 and March 31, 2021.

As of December 31, 2020, there was $12.9 million outstanding on the Credit Facility and an available balance of approximately $1.4 million and as of March 31, 2021, there was $15.1 million outstanding on the Credit Facility.

The Company recorded interest expense from the Credit Facility of approximately $0.5 million and $0.3 million for the three months ended March 31, 2020 and 2021 respectively, which included $0.2 million and $0.1 million, respectively, relating to debt issuance costs.

Subsequent to the three months ended March 31, 2021, the Company paid off all obligations owing under, and terminated, the Credit Facility (Note 12).

Horizon Term Loan

On December 31, 2018, the Company entered into a term loan agreement (the "Horizon Loan Agreement") with Horizon Technology Finance Corporation ("Horizon"). As part of the Horizon Loan Agreement, the Company obtained a four-year $15.0 million term loan (the "Horizon Term Loan"). The Horizon Term Loan bore interest at 9.90% plus the amount by which one-month LIBOR exceeded 2.50% for outstanding borrowings, and payments on principal were made on a monthly basis. The maturity date of the Horizon Term Loan was January 2023.

On December 1, 2020, the Company paid off all remaining obligations under the Horizon Term Loan for $15.0 million and terminated the Horizon Term Loan. The Company recorded interest expense from the Horizon Term Loan of $0.5 million and $0.0 million for the three months ended March 31, 2020 and 2021, respectively, which included $0.1 million and $0.0 million, respectively, relating to debt issuance costs.

High Trail Loan December 2020 Note

On December 1, 2020, the Company refinanced the Horizon Term Loan through the issuance of the December 2020 Note to High Trail SA. The Company received gross proceeds of $38.0 million in exchange for the December 2020 Note with an aggregate principal amount of $43.0 million. The December 2020 Note was to be repaid over 24 equal monthly cash payments of $1.8 million.

The December 2020 Note consisted of the following as of December 31, 2020 and March 31, 2021:

	December 31, 2020	March 31, 2021
	(in thousands)	
December 2020 Note	$ 43,000	$ 37,600
Less: deferred debt issuance costs	(2,207)	(1,717)
Less: discount associated with issuance of warrants	(9,839)	(7,842)
Less: discount associated with original issuance of loan	(4,692)	(3,740)
High Trail warrant	31,821	67,609
Total December 2020 Note	58,083	91,910
Less-current portion	(21,600)	(21,600)
Term loan-non current portion	$ 36,483	$ 70,310

The December 2020 Note contained a minimum liquidity financial covenant that required the Company to maintain a minimum of $10.0 million in unrestricted cash on hand. Additionally, as of the last day of each applicable fiscal quarter, the Company was required to maintain Adjusted EBITDA amounts for the 12-month period ending on such day, as defined in the December 2020 Note. The Company was in compliance with the December 2020 Note's financial covenants as of December 31, 2020 and March 31, 2021.

High Trail February 2021 Note

On February 2, 2021, the Company entered into a securities purchase agreement with High Trail Investments ON LLC ("High Trail ON" and, together with High Trail SA, "High Trail") for a 0% coupon senior secured promissory note in an aggregate principal amount of $16.5 million (as amended, the "February 2021 Note") that was to mature on February 1, 2023.

February 2021 Note consisted of the following as of March 31, 2021:

	March 31, 2021
	(in thousands)
February 2021 Note	$ 16,500
Less: deferred debt issuance costs	(1,331)
Less: discount associated with issuance of warrants	(7,407)
Less: discount associated with original issuance of loan	(2,368)
High Trail warrant	8,026
Total February 2021 Note	13,420
Less-current portion	—
Term loan-non current portion	$ 13,420

The Company recorded interest expense from December 2020 Note of $1.1 million for the year-ended December 31, 2020, which included $0.2 million relating to debt issuance costs. The Company recorded interest expense from December 2020 Note and February 2021 Note of $3.9 million for the quarter-ended March 31, 2021, which included $0.5 million relating to debt issuance costs.

The Company was in compliance with February 2021 Note financial covenants as of March 31, 2021.

Warrants

In connection with the issuance of the December 2020 Note, the Company issued to High Trail SA a warrant to purchase an aggregate of 2,864,133 shares of its common stock at an exercise price of $9.01 per share (the "December Warrant"). The December Warrant initially provided that it would be exercisable on June 1, 2021, expire five years from the date of issuance and be exercisable on a cash basis, unless there was not an effective registration statement covering the resale of the shares issuable upon exercise of the December Warrant, in which case the December Warrant would also be exercisable on a cashless exercise basis at High Trail SA's election. The December Warrant included a provision that gave the Company the right to require High Trail SA to exercise the December Warrant if the price of the common stock of the Company exceeded 200% of the exercise price of the December Warrant for 20 consecutive trading days and certain other conditions were satisfied. The Company utilized the Monte-Carlo Simulation model to determine the fair value of the December Warrant. Due to the complexity of the warrants issued, the Company uses an outside expert to assist in providing the mark to market fair valuation of the liabilities over the reporting periods in which the original agreement was in effect. Inputs used to determine estimated fair value of the warrant liabilities include the fair value of the underlying stock at the valuation date, the term of the warrants, and the expected volatility of the underlying stock. The significant unobservable input used in the fair value measurement of the warrant liabilities is the estimated term of the warrants. Generally, increases (decreases) in the fair value of the underlying stock and estimated term result in a directionally similar impact to the periodic fair value measurement of the outstanding warrant liability, and are recorded within the Change in fair market value of warranty line item on the statement of operations.

On February 8, 2021, the Company entered into a letter agreement with High Trail SA (the "Letter Agreement"), pursuant to which, among other things, (i) the Company and High Trail SA agreed to amend the terms of the December Warrant, to provide that the December Warrant was immediately exercisable on a cash basis, (ii) High Trail SA agreed to exercise 980,000 shares of the Company's common stock subject to the December Warrant (the "December Warrant Shares") for an aggregate payment to the Company of $8.8 million, (iii) High Trail SA and the Company agreed to cancel the unexercised portion of the December Warrant in exchange for an aggregate payment by High Trail SA to the Company of $17.0 million and the issuance by the Company to High Trail SA of a warrant to purchase 1,884,133 shares of the Company's common stock (the "Penny Warrant"), (iv) the Company agreed to seek stockholder approval (collectively, the "Stockholder Approvals") at a stockholder meeting to be held no later than May 31, 2021 (the “Stockholder Meeting”) to issue shares of the Company’s common stock in excess of the limitations imposed by Nasdaq Listing Standard Rule 5635(a) and/or 5635(d) (collectively, the “Nasdaq Rules”) pursuant to the Additional Warrant (as defined below), the Note, the February Note, that certain Warrant to purchase common stock issued by the Company to High Trail ON on February 2, 2021 (as amended, the “February Warrant”) and that certain Asset Purchase Agreement, dated February 2, 2021, by and among the Company and Truweo, LLC, as purchaser, Healing Solutions, Jason R. Hope, and for the purposes of Section 5.11 and Article VII, Super Transcontinental Holdings LLC (the “Asset Purchase Agreement”), (v) the Company agreed to issue to High Trail SA a warrant to purchase 750,000 shares of the Company’s common stock (the “Additional Warrant”), (vi) the Company agreed to prepare and file by March 26, 2021 a registration statement (the “Registration Statement”) with the Securities and Exchange Commission for the purpose of registering for resale the December Warrant Shares and the shares issuable upon exercise of the Penny Warrant (the “Penny Warrant Shares”), and (vii) High Trail SA agreed, for the first 30 days following the effectiveness of the Registration Statement, not to sell, or otherwise transfer or dispose of the December Warrant Shares or Penny Warrant Shares on any day in an amount that is greater than 10% of the trading volume of the Company’s common stock for such day.

Pursuant to the Letter Agreement, High Trail SA exercised the December Warrant and the Company issued the Penny Warrant and the Additional Warrant to High Trail SA on February 9, 2021.On February 8, 2021, the Company entered into (i) an amendment (the “2022 Note Amendment”) to the December 2020 Note, (ii) an amendment (the “2023 Note Amendment”) to the February 2021 Note, and (iii) an amendment (the “Warrant Amendment”) to the February Warrant.

The 2022 Note Amendment and the 2023 Note Amendment amend the December 2020 Note and the February 2021 Note, respectively, to provide that no shares of common stock may be issued pursuant thereto unless the Company obtains the Stockholder Approvals to issue shares of Company’s common stock pursuant thereto in excess of the limitations imposed by the Nasdaq Rules.

The Warrant Amendment amends the February Warrant to provide that: (i) it may only be exercised for up to 134,348 shares of Company’s common stock unless the Company obtained the Stockholder Approval contemplated by the Nasdaq Rules to issue additional shares of Company’s common stock in excess of 134,348 shares, (ii) its term shall be the later of five years from the date of issuance and the date that is one year from the date that the Stockholder Approvals are obtained, and (iii) the beneficial ownership limitation is increased from 4.99% to 9.99%.

As of December 1, 2020, the initial fair value of the December Warrant on issuance was $10.5 million, which has been recorded as a debt discount against the December 2020 Note. During the year ended December 31, 2020, the fair value amount of this warrant liability was approximately $31.8 million which includes a change of fair value impact of approximately $21.3 million. During the quarter ended March 31, 2021, the fair value amount of the December 2020 Note and February 2021 Note warrant liability was approximately $75.6 million which includes a change of fair value impact of approximately $50.3 million which includes change in fair value of warrant liability and loss on initial issuance of warrant.

The December Warrant is classified as a liability on the consolidated balance sheet as the December Warrant contains certain change of control provisions that would benefit the holder as it relates to the calculation of the value of the warrant under certain circumstances.

Interest Expense, Net

Interest expense, net consisted of the following for the three months ended March 31, 2020 and 2021:

	Three Months Ended	
	March 31, 2020	March 31, 2021
	(in thousands)	
Interest expense	$ 1,133	$ 4,753
Interest income	(24)	(333)
Total Interest expense, net	$ 1,109	$ 4,420

7. STOCK-BASED COMPENSATION

The Company has three equity plans:

2014 Amended and Restated Equity Incentive Plan

The board of directors of Aterian Group, Inc., a subsidiary of the Company (“AGI”), adopted, and AGI’s stockholders approved, the Mohawk Group, Inc. 2014 Equity Incentive Plan on June 11, 2014. On March 1, 2017, AGI’s board of directors adopted, and AGI’s stockholders approved, an amendment and restatement of the 2014 Equity Incentive Plan (as amended, the “2014 Plan”). As of March 31, 2021, 56,458 shares were reserved for awards available for future issuance under the Aterian 2014 Plan.

2018 Equity Incentive Plan

The Company’s board of directors adopted the Aterian, Inc. 2018 Equity Incentive Plan (the “2018 Plan”) on October 11, 2018. The 2018 Plan was approved by its stockholders on May 24, 2019. As of March 31, 2021, 93,615 shares were reserved for awards available for future issuance under the 2018 Plan.

Options granted to date under the 2014 Plan and the 2018 Plan generally vest either: (i) over a four-year period with 25% of the shares underlying the options vesting on the first anniversary of the vesting commencement date with the remaining 75% of the shares vesting on a pro-rata basis over the succeeding thirty-six months, subject to continued service with the Company through each vesting date, or (ii) over a three-year period with 33 1/3% of the shares underlying the options vesting on the first anniversary of the vesting commencement date with the remaining 66 2/3% of the shares vesting on a pro-rata basis over the succeeding twenty-four months, subject to continued service with the Company through each vesting date. Options granted are generally exercisable for up to 10 years subject to continued service with the Company.

2019 Equity Plan

The Company’s board of directors adopted the Aterian, Inc. 2019 Equity Plan (the “2019 Equity Plan”) on March 20, 2019. The 2019 Equity Plan was approved by its stockholders on May 24, 2019. As of December 31, 2020, no shares were reserved for future issuance. Shares of restricted common stock granted under the 2019 Equity Plan initially vested in substantially equal installments on the 6th, 12th, 18th and 24th monthly anniversary of the closing of the Company’s initial public offering (“IPO”). The Company and the 2019 Equity Plan participants subsequently agreed to extend (i) the vesting date for the first installment of shares of restricted common stock under the 2019 Equity Plan to March 13, 2020, (ii) the vesting date for the second installment of shares of restricted common stock to December 15, 2020, (iii) the vesting date for the third installment of shares of restricted common stock to either January 18, 2021 or March 10, 2021, and (iv) the vesting date for the fourth installment of shares of restricted common stock to July 1, 2021. Awards granted under the 2019 Equity Plan and not previously forfeited upon termination of service carry dividend and voting rights applicable to the Company’s common stock, irrespective of any vesting requirement. Under ASC Topic 718, the Company treats each award in substance as multiple awards as a result of the graded vesting and the fact that there is more than one requisite service period. Upon the prerequisite service period becoming probable, the day of the IPO, the Company recorded a cumulative catch up expense and the remaining expense will be recorded under graded vesting. In the event the service of a participant in the 2019 Equity Plan (each, a “Participant”) is terminated due to an “involuntary termination”, then all of such Participant’s unvested shares of restricted common stock shall vest on the date of such involuntary termination unless, within three business days of such termination (1) the Company’s board of directors unanimously determines that such vesting shall not occur and (2) the remaining Participants holding restricted share awards covering at least 70% of the shares of restricted common stock issued and outstanding under the 2019 Equity Plan determine that such vesting shall not occur. In the event of a forfeiture, voluntary or involuntary, of shares of restricted common stock granted under the 2019 Equity Plan, such shares are automatically reallocated to the remaining Participants in proportion to the number of shares of restricted common stock covered by outstanding awards that each such Participant holds.

The following is a summary of stock option activity during the three months ended March 31, 2021:

	Options Outstanding			
	Number of Options	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Life (years)	Aggregate Intrinsic Value
Balance—January 1, 2021	1,570,728	$ 9.09	7.71	$ 12,756
Options granted	—	$ —	—	$ —
Options exercised	(978,495)	$ 9.01	—	$ —
Options cancelled	—	$ —	—	$ —
Balance—March 31, 2021	592,233	$ 9.22	7.56	$ 12,013
Exercisable as of March 31, 2021	370,183	$ 9.09	7.48	$ 7,556
Vested and expected to vest as of March 31, 2021	592,233	$ 9.22	7.56	$ 12,013

As of March 31, 2021, the total unrecognized compensation expense related to unvested options was $2.9 million, which the Company expects to recognize over an estimated weighted average period of 0.55 years.

A summary of restricted stock award activity within the Company's equity plans and changes for the three months ended March 31, 2021 is as follows:

Restricted Stock Awards	Shares	Weighted Average Grant-Date Fair Value
Nonvested at January 1, 2021	3,259,389	$ 13.51
Granted	—	$ —
Vested	(542,834)	$ 15.77
Forfeited	—	$ —
Nonvested at March 31, 2021	2,716,555	$ 11.81

On March 12, 2020, 371,320 shares of restricted common stock were forfeited and treated as a cancellation with remaining unrecognized expense for the unvested awards recognized on the date of cancellation. The Company did not reverse previously recognized compensation expenses as a result of these cancellations.

As of March 31, 2020, the total unrecognized compensation expense related to unvested shares of restricted common stock was $14.7 million, which the Company expects to recognize over an estimated weighted-average period of one year. As of March 31, 2021, the total unrecognized compensation expense related to unvested shares of restricted common stock was $8.6 million, which the Company expects to recognize over an estimated weighted-average period of 0.69 years.

Stock-based compensation expense is allocated based on the cost center to which the award holder belongs. The following table summarizes the total stock-based compensation expense by function, including expense related to consultants, for the three months ended March 31, 2020 and 2021:

	Three Months Ended March 31,	
	2020	2021
	(in thousands)	
Sales and distribution expenses	$ 1,592	$ 955
Research and development expenses	1,273	883
General and administrative expenses	4,574	5,061
Total stock-based compensation expense	$ 7,439	$ 6,899

8. NET LOSS PER SHARE

Basic net loss per share is determined by dividing net loss by the weighted-average shares of common stock outstanding during the period. Diluted net loss per share is determined by dividing net loss by diluted weighted-average shares outstanding. Diluted weighted-average shares reflect the dilutive effect, if any, of potentially dilutive shares of common stock, such as options to purchase common stock calculated using the treasury stock method and convertible notes using the "if-converted" method. In periods with reported net operating losses, all options to purchase common stock are deemed anti-dilutive such that basic net loss per share and diluted net loss per share are equal.

The Company's shares of restricted common stock are entitled to receive dividends and hold voting rights applicable to the Company's common stock, irrespective of any vesting requirement. Accordingly, although the vesting commences upon the elimination of the contingency, the shares of restricted common stock are considered a participating security and the Company is required to apply the two-class method to consider the impact of the shares of restricted common stock on the calculation of basic and diluted earnings per share. The Company is currently in a net loss position and is therefore not required to present the two-class method; however, in the event the Company is in a net income position, the two-class method must be applied by allocating all earnings during the period to shares of common stock and shares of restricted common stock.

The following table sets forth the computation of basic and diluted net loss per share (in thousands, except per share data):

	Three Months Ended March 31,	
	2020	2021
	(in thousands)	
Net loss	$ (15,030)	$ (82,553)
Weighted-average number of shares outstanding used in computing net loss per share, basic and diluted	15,193,647	26,225,383
Net loss per share, basic and diluted	$ (0.99)	$ (3.15)

9. COMMITMENTS AND CONTINGENCIES

Legal Proceedings—The Company is party to various actions and claims arising in the normal course of business. The Company does not believe that the final outcome of these matters will have a material adverse effect on the Company's condensed consolidated financial position or results of operations. In addition, the Company maintains what it believes is adequate insurance coverage to further mitigate risk. However, no assurance can be given that the final outcome of such proceedings will not materially impact the Company's condensed consolidated financial condition or results of operations. Further, no assurance can be given that the amount or scope of existing insurance coverage will be sufficient to cover losses arising from such matters.

Sales or Other Similar Taxes— Based on the location of the Company's current operations, the majority of sales tax is collected and remitted either by the Company or on its behalf by e-commerce marketplaces in most states within the United States. To date, the Company has had no actual or threatened sales and use tax claims from any state where it does not already claim nexus or any state where it sold products prior to claiming nexus. However, the Company believes that the likelihood of incurring a liability as a result of sales tax nexus being asserted by certain states where it sold products prior to claiming nexus is probable. As of each of December 31, 2020 and March 31, 2021, the Company estimates that the potential liability, including current sales tax payable is approximately $0.5 million and $0.6 million, respectively, which has been recorded as an accrued liability. The Company believes this is the best estimate of an amount due to taxing agencies, given that such a potential loss is an unasserted liability that would be contested and subject to negotiation between the Company and the state, or decided by a court.

U.S. Department of Energy— In September 2019, the Company received a Test Notice from the U.S. Department of Energy ("DOE") indicating that a certain dehumidifier model may not comply with applicable energy-conservation standards. The DOE requested that the Company provide it with several model units for DOE testing. If the Company is determined to have violated certain energy-conservation standards, it could be fined pursuant to DOE guidelines, and this civil penalty may be material to the Company's consolidated financial statements. The Company intends to vigorously defend itself. The Company has submitted to the DOE testing process, made a good-faith effort to provide necessary notice as practicable, and included in a formal response to the DOE copies of the energy-efficiency report and certification that were issued for the dehumidifier model at the time of production. The Company believes that its products are compliant, and the Company, in conjunction with its manufacturing partner, has disputed the Test Notice received from the DOE. As of the date of the issuance of these financial statements, the Company cannot reasonably estimate what, if any, penalties may be levied.

U.S. Environmental Protection Agency—In September 2019, the Company received notice from the U.S. Environmental Protection Agency ("EPA") that certain of its dehumidifier products were identified by the Association of Home Appliance Manufacturers ("AHAM") as failing to comply with EPA ENERGY STAR requirements. For an appliance to be ENERGY STAR certified, it must meet standards promulgated by the EPA and enforced through EPA-accredited certification bodies and laboratories. The Company believes that its products are compliant, and the Company, in conjunction with its manufacturing partner, has disputed the AHAM testing determination pursuant to EPA guidelines. While a resolution remains pending, the Company is not selling or marketing the products identified by the EPA. The Company cannot be certain that these products will eventually be certified by the EPA, and the Company may incur costs that cannot presently be calculated in the event that the Company needs to make changes to the manner in which these products are manufactured and sold.

In April 2020, the Company received notice from the EPA with respect to regulatory compliance and the advertising associated with certain of its dehumidifier products. The Company believes that its products are compliant, and the Company is currently in discussions with the EPA to resolve the matter. The EPA has placed a hold on the sale of certain of the Company's dehumidifier inventory while it reviews the matter with the Company. As of October 2020, the Company is able to resume selling the products identified by the EPA, and discussions are continuing with the EPA. The Company cannot be certain of the outcome with the EPA, and the Company may incur costs and penalties that cannot presently be calculated in the event that the Company is unable to resolve this matter with the EPA.

10. ACQUISITION

On February 2, 2021 (the "Closing Date"), the Company entered into and closed the Asset Purchase Agreement with Healing Solutions. Pursuant to the Asset Purchase Agreement, the Company purchased and acquired certain assets of Healing Solutions (the "Healing Solutions Assets") related to Healing Solutions' retail and e-commerce business under the Healing Solutions' brands, Tarvol, Sun Essential Oils and Artizen (among others), which primarily sells essential oils through Amazon and other marketplaces (the "Asset Purchase"). The Acquisition was accounted for as a business combination using the acquisition method of accounting in accordance with ASC 805, Business Combinations. As consideration for the Asset Purchase, the Company (i) paid to Healing Solutions $15.3 million in cash (the "Cash Purchase Price"), and (ii) issued 1,387,759 shares of common stock to Healing Solutions, the cost basis of which was the closing price per share of the common stock on the Closing Date. At the closing (the "Closing"), the Company withheld $2.0 million of the Cash Purchase Price to serve as collateral for Healing Solutions' payment of certain overdue trade payables to be released to Healing Solutions in accordance with the terms of the Asset Purchase Agreement. This amount was paid by the Company within 60 days of closing.

In addition, Healing Solutions will also be entitled to receive 170,042 shares of common stock (up to a maximum of 280,000 shares pursuant to certain terms and valuation at the measurement date) in respect of certain inventory. The shares will be issued to Healing Solutions following the final determination of inventory values pursuant to the terms of the Asset Purchase Agreement, which determination is expected to occur approximately nine to ten months following the Closing Date and such shares will be subject to vesting restrictions which will lapse on the date that is the one-year anniversary after the Closing Date. Pursuant to the terms of the Asset Purchase Agreement, Seller is required to use its commercially reasonable efforts to identify one or more suppliers of finished goods inventory of all SKUs that constitute assets acquired in the Asset Purchase ("New Suppliers") and to initiate discussions with such New Suppliers for the purpose of negotiating new supply agreements between Purchaser or its affiliates, on the one hand, and the New Supplier, on the other hand, for the purchase of such SKUs following the Closing on terms acceptable to Purchaser in its sole discretion, acting reasonably. If, on or before the date that is 15 months after the Closing Date, an Earn-Out Consideration Event has occurred, then Seller shall be entitled to receive up to a maximum of 528,670 shares of Common Stock (the "Earn-Out Shares"), which number of shares is subject to reduction in accordance with the terms of the Asset Purchase Agreement based on the time period within which the Earn-Out Consideration Event occurs.

The following presents the preliminary allocation of purchase price to the assets acquired and liabilities assumed, based on the estimated fair values at acquisition date:

		Amount allocated
		(in thousands)
Cash purchase price	$	15,280
1,387,759 shares of common stock issued at the Closing		39,454
Estimated common share consideration for inventory		5,285
Estimated earnout liability		11,273
Total consideration	$	71,292

The amounts assigned to goodwill and major intangible asset classifications were as follows:

	Total
	(in thousands)
Inventory	8,215
Working Capital	202
Trademarks (10 year useful life)	22,900
Goodwill	39,975
Net assets acquired	71,292

Goodwill is expected to be deductible for tax purposes. The goodwill is attributable to expected synergies resulting from integrating the Healing Solutions' products into the Company's existing sales channels.

Pro Forma Information

The following unaudited pro forma information illustrates the impact of the Healing Solutions Assets acquisition on the Company's net revenue for the three months ended March 31, 2021 and 2020. The acquisition of the Healing Solutions Assets is reflected in the following pro forma information as if the acquisition had occurred on January 1, 2020.

	Three Months Ended March 31	
	2020	2021
	(in thousands)	
Net revenue as reported	$ 25,628	$ 48,136
Healing Solution net revenue	14,423	4,600
Net revenue pro forma	$ 40,051	$ 52,736
Operating loss as reported	$ (13,896)	$ (27,751)
Healing Solution operating income	1,004	382
Operating loss pro forma	$ (12,892)	$ (27,369)

Contingent earn-out liability considerations

The Company reviews and re-assesses the estimated fair value of contingent consideration on a quarterly basis, and the updated fair value could differ materially from the initial estimates. Adjustments to the estimated fair value related to changes in all other unobservable inputs are reported in operating income.

On December 1, 2020, the Company acquired the assets of leading e-commerce business brands Mueller, Pursteam, Pohl and Schmitt, and Spiralizer (the "Smash Assets") for total consideration of (i) $25.0 million, (ii) 4,220,000 shares of common stock, the cost basis of which was $6.89 (closing stock price at closing of the transaction), of which 164,000 of such shares were issued to the sellers brokers and (iii) a seller note in the amount of $15.6 million, representing the value of certain inventory that the sellers had paid for but not yet sold as of the closing date. In addition, subject to achievement of certain contribution margin thresholds on certain products of the acquired business for the fiscal years ending December 31, 2021 and December 31, 2022, the sellers will be entitled to receive earn out payments.

As part of the acquisition of the Smash Assets, the sellers of the Smash Assets are entitled to earn-out payments based on the achievement of certain contribution margin thresholds on certain products of the acquired business. Earn-out payments will be due to the sellers for year one, or calendar year 2021 in the first quarter of 2022, and year two, or calendar year 2022, will be due in the first quarter of 2023. During the year-ending December 31, 2021 (year one of the earn-out), the earn-out payment will be calculated based on the contribution margin generated on certain products for an amount equal to $1.67 for every $1.00 of such contribution margin that is greater than $15.5 million and less than or equal to $18.5 million. Such earn-out payment cannot exceed $5.0 million. In addition, during the year-ending December 31, 2022 (year two of the earnout), for each $0.5 million of contribution margin generated on certain products in excess of $15.5 million, subject to a cap of $27.5 million, the sellers shall be entitled to receive an amount in cash equal to the value of 0.1 million shares of the Company's common stock multiplied by the average of the volume-weighted-average closing price per share of the Company's common stock, for the 30 consecutive trading days ending on December 31, 2022.

As of December 1, 2020, the acquisition date, the initial fair value amount of the earn-out payment was appropriately $9.8 million. As of December 31, 2020, the fair value amount of the earn-out payment with respect to the Smash Assets was approximately $22.5 million, representing a change of fair value impact of approximately $12.7 million. As of March 31, 2021, the fair value amount of the earn-out payment with respect to the Smash Assets was approximately $37.6 million, representing a change of fair value impact of approximately $15.0 million for the three months ended March 31, 2021.

As part of the acquisition of the Healing Solutions Assets, the Healing Solutions is entitled to earn-out payments based on the achievement of certain contribution margin thresholds on certain products of the acquired business. If the earn-out consideration event occurs: (i) prior to the date that is nine months following the Closing Date, the Company will issue 528,670 shares of its common stock to Healing Solutions; (ii) on or after the date that is nine months following the Closing Date but before the date that is 12 months following the Closing Date, the Company will issue 396,502 shares of common stock to Healing Solutions; or (iii) on or after the date that is 12 months following the Closing Date but before the date that is 15 months following the Closing Date (the date that is 15 months following the Closing Date, the “Earn-Out Termination Date”), the Company will issue 264,335 shares of common stock to Healing Solutions; or after 15 months, the Company will not have any obligation to issue any shares of its common stock to Healing Solutions.

As of February 2, 2021, the acquisition date, the initial fair value amount of the earn-out payment with respect to the Healing Solutions Assets was appropriately $16.5 million. As of March 31, 2021, the fair value amount of the earn-out payment with respect to the Healing Solutions Assets was approximately $17.2 million, representing a change of fair value impact of approximately $0.6 million.

The following table summarizes the changes in the carrying value of estimated contingent earn-out liabilities (in thousands) as of March 31, 2021:

	March 31, 2021		
	Smash Assets	Healing Solutions	Total
Beginning Balance at December 31, 2020	$ 22,531	$ —	$ 22,531
Acquisition date fair value of contingent earn-out liabilities and inventory to be settled in shares	—	16,558	16,558
Change in fair value of contingent earn-out liabilities	15,020	625	15,645
Earn-out payments	—	—	—
Ending Balance	$ 37,551	$ 17,183	$ 54,734

11. GOODWILL AND INTANGIBLES

The following tables summarize the changes in the Company’s goodwill and intangible assets as of December 31, 2020 and March 31, 2021 (in thousands):

	December 31, 2019	Years-Ended December 31, 2020		December 31, 2020			
	Gross Carrying Amount	Additions	Impairments	Gross Carrying Amount	Goodwill Impairments	Accumulated Amortization	Net Book Value
Goodwill	$ 745	$ 46,573	$ —	$ 47,318	$ —	$ —	$ 47,318
Trademarks	310	31,500	—	31,810	—	(442)	31,368
Non-competition agreement	11	100	—	111	—	(19)	92
Transition services agreement	12	11	—	23	—	(23)	—
Total	$ 1,078	$ 78,184	$ —	$ 79,262	$ —	$ (484)	$ 78,778

	December 31, 2020	Three Months Ended March 31, 2021		March 31, 2021			
	Gross Carrying Amount	Additions	Impairments	Gross Carrying Amount	Goodwill Impairments	Accumulated Amortization	Net Book Value
Goodwill	$ 47,318	$ 39,975	$ —	$ 87,293	$ —	$ —	$ 87,293
Trademarks	31,810	22,200	—	54,010	—	(1,616)	52,394
Non-competition agreement	111	—	—	111	—	(25)	86
Transition services agreement	23	—	—	23	—	(23)	—
Option to purchase additional inventory	—	700	—	700	—	—	700
Total	$ 79,262	$ 62,875	$ —	$ 142,137	$ —	$ (1,664)	$ 140,473

12. SUBSEQUENT EVENTS

The Letter Agreement

On April 8, 2021, the Company entered into a Letter Agreement (the “April Letter Agreement”) with High Trail SA and High Trail ON, pursuant to which, among other things, (i) the Company and High Trail SA agreed to amend the terms of the Letter Agreement to provide that the Company will prepare and file by June 30, 2021 a registration statement (the “Resale Registration Statement”) with the Securities and Exchange Commission for the purposes of registering for resale the December Warrant Shares, the Penny Warrant Shares and the Restricted Shares (as defined below), (ii) the Company agreed to issue 130,000 shares of its common stock to High Trail SA (the “Restricted Shares”), and (iii) High Trail SA and High Trail ON agreed to waive any Default or Event of Default (as such terms are defined in the December 2020 Note or the February 2021 Note) caused by the Company’s failure to file the Resale Registration Statement by March 26, 2021. Pursuant to the April Letter Agreement, the Company issued the Restricted Shares to High Trail SA on April 8, 2021.

Securities Purchase Agreement with High Trail

On April 8, 2021, the Company entered into a securities purchase and exchange agreement (the “Securities Purchase Agreement”) with High Trail SA and High Trail ON, pursuant to which, among other things, the Company agreed to issue and sell to High Trail, in a private placement transaction (the “Private Placement”), (i) senior secured promissory notes in an aggregate principal amount of $110,000,000 (the “Notes”) that will accrue interest at a rate of 8% per annum and mature on April 8, 2024, and (ii) warrants (the “Warrants” and each, a “Warrant”) to purchase up to an aggregate of 2,259,166 shares of the Company’s common stock in exchange for: (a) a cash payment by High Trail to the Company of $57.7 million, (b) the December 2020 Note, and (c) the February 2021 Note.

The Company used $14.8 million of the net proceeds from the Private Placement to repay all amounts owed under the Credit Facility on April 8, 2021.

On April 8, 2021, the Company entered into (i) an amendment (the “SPA Amendment”) to that certain Securities Purchase Agreement, dated as of November 30, 2020, by and between the Company and High Trail SA (the “December 2020 SPA”), and to that certain Securities Purchase Agreement, dated as of February 2, 2021, by and between the Company and High Trail ON (the “February 2021 SPA”), (ii) an amendment to the February Warrant (the “February Warrant Amendment”), (iii) an amendment to the Penny Warrant (the “Penny Warrant Amendment”), and (iv) an amendment to the Additional Warrant (the “Additional Warrant Amendment” and, together with the February Warrant Amendment and the Penny Warrant Amendment, the “Warrant Amendments”).The SPA Amendment amends the December 2020 SPA and the February 2021 SPA to, among other things, allow for the issuance of the Notes and to waive certain rights of High Trail under the December SPA and the February SPA. The Warrant Amendments amend the February Warrant, the Penny Warrant and the Additional Warrant to amend the definition of “Black Scholes Value” in each warrant to provide that the expected volatility used in the Black Scholes Value shall equal 100% instead of the greater of 100% and the 100-day volatility obtained from the HVT function on Bloomberg (determined utilizing a 365-day annualization factor) as of the trading day immediately following the public announcement of a Change of Control (as defined in each of the warrants), or, if the Change of Control is not publicly announced, the date the Change of Control is consummated.

Termination of MidCap Credit Agreement

On April 8, 2021, the Company paid off all obligations owing under, and terminated, the Credit Facility.

Pursuant to the Credit Facility, upon the payment of the amounts outstanding under the Credit Facility, the Company paid a prepayment fee and a payoff letter preparation fee in an aggregate amount equal to 4.3% of the then outstanding principal balance of the Credit Facility.

Settlement Agreement

On May 2, 2021, the Company entered into a settlement agreement with one of Company’s suppliers to agree to pay the amount of $3.0 million to the Company in three installments of $1,000,000.00 each, with the first payment to be paid on or before May 31, 2021, the second payment to be paid on or before September 30, 2021, and the third payment to be paid on or before November 30, 2021

Acquisition of Squatty Potty Assets

On May 6, 2021, the Company has acquired the business of e-commerce and retail company Squatty Potty, LLC (“Squatty Potty”), a leading online seller of health and wellness products in an asset purchase transaction. Currently, Squatty Potty products are sold in thousands of retail locations including Bed, Bath & Beyond, Walmart and Target. As consideration for Squatty Potty’s assets, the Company paid approximately $19.0 million in cash. The Company also paid approximately $1.1 million as consideration related to acquired inventory. In addition, and subject to the achievement of contribution margin metrics for the year ended December 31, 2021, the Company agreed to pay Squatty Potty a maximum earnout of approximately $4.0 million, payable in stock or cash at the seller’s discretion. Aterian also agreed to pay Squatty Potty $8.0 million for transition services, payable in stock or cash at the seller’s discretion.

Closing of Photo Paper Direct Acquisition

On May 6, 2021, the Company closed the acquisition of all outstanding stock of e-commerce company Photo Paper Direct Ltd. (“Photo Paper Direct"), a leading online seller of printing supplies. As consideration for Photo Paper Direct’s stock, the Company paid approximately $8.28 million in cash and issued approximately 704,500 shares of the Company’s common stock. The Company also agreed to pay approximately $5.4 million in cash as consideration related to Photo Paper Direct’s inventory and other working capital assets, including cash on hand of approximately $3.0 million. In addition, and subject to the achievement of certain Adjusted EBITDA metrics by December 31, 2021, the Company agreed to issue to Photo Paper Direct a maximum earnout of $6.0 million in cash and $2.0 million in the Company common stock. In connection with the transaction, the former shareholders of Photo Paper Direct signed a voting and standstill agreement.

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

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our condensed consolidated financial statements and related notes appearing elsewhere in this Quarterly Report on Form 10-Q and with our audited financial statements and related notes thereto for the year ended December 31, 2020 included in our Annual Report on Form 10-K for the year ended December 31, 2020 as filed with the Securities and Exchange Commission (the “SEC”) on March 16, 2021. As discussed in the section titled “Special Note Regarding Forward-Looking Statements”, the following discussion and analysis contains forward-looking statements that involve risks and uncertainties, as well as assumptions that, if they never materialize or prove incorrect, could cause our results to differ materially from those expressed or implied by such forward-looking statements. Factors that could cause or contribute to these differences include, but are not limited to, those identified in the section titled “Special Note Regarding Forward Looking Statements” and those discussed in the section titled “Risk Factors” under Part II, Item 1A in this Quarterly Report on Form 10-Q.

Unless the context otherwise requires, the terms “Aterian,” the “Company,” “we,” “us” and “our” in this Quarterly Report on Form 10-Q refer to Aterian, Inc. and our consolidated subsidiaries, including Aterian Group, Inc.

Overview

Aterian is a technology-enabled consumer products platform that builds, acquires and partners with e-commerce brands. Aterian was founded on the premise that if a company selling consumer packaged goods was founded today, it would apply AI and machine learning, the synthesis of massive quantities of data and the use of social proof to validate high caliber product offerings as opposed to over-reliance on brand value and other traditional marketing tactics. Today, we predominantly operate through online retail channels such as Amazon.com (“Amazon”) and Walmart, Inc.

We have launched and sold hundreds of SKUs on e-commerce platforms. Through the success of a number of those products we have incubated our own brands. We also have purchased brands and products when we believe it is more advantageous. Today, we own and operate twelve brands which sell products in multiple categories, including home and kitchen appliances, kitchenware, heating, cooling and air quality appliances (dehumidifiers, humidifiers and air conditioners), health and beauty products and essential oils. Our twelve brands include, hOmeLabs; Vremi, Xtava; RIF6; Aussie Health; Holonix; Truweo; Mueller; Pursteam; Pohl and Schmitt; Spiralizer; and Healing Solutions.

Seasonality of Business and Product Mix

Our individual product categories are typically affected by seasonal sales trends primarily resulting from the timing of the summer season for certain of our environmental appliance products and the fall and holiday season for our small kitchen appliances and accessories. With our current mix of environmental appliances, the sales of those products tend to be significantly higher in the summer season. Further, our small kitchen appliances and accessories tend to have higher sales during the fourth quarter, which includes Thanksgiving and the December holiday season. As a result, our operational results and cash flows may fluctuate materially in any quarterly period depending on, among other things, adverse weather conditions, and changes in our product mix.

Each of our products typically goes through the Launch phase and depending on its level of success is moved to one of the other phases as further described below:

i. Launch phase: During this phase, we leverage our technology to target opportunities identified using AIMEE. During this period of time and due to the combination of discounts and investment in marketing, our net margin for a product could be as low as approximately negative 35%. Net margin is calculated by taking net revenue less cost of goods sold, less fulfillment, online advertising and selling expenses. These costs primarily reflect the estimated variable costs related to the sale of a product.

ii. Sustain phase: Our goal is for every product we launch to enter the sustain phase and become profitable, with a target average of positive 15% net margin, within approximately three months of launch on average. Net margin primarily reflects a combination of manual and automated adjustments in price and marketing spend. Over time, our products benefit from economies of scale stemming from purchasing power both with manufacturers and with fulfillment providers.

iii. Milk phase or Liquidate phase: If a product does not enter the sustain phase or if the customer satisfaction of the product (i.e., ratings) is not satisfactory, then it will go to the liquidate phase and we will sell the remaining inventory. In order to enter the milk phase, we believe that a product must be well received and become a strong leader in its category in both customer satisfaction and volume sold as compared to its competition. Products in the milk phase that have achieved profitability should benefit from pricing power and we expect their profitability to increase accordingly. To date, none of our products have achieved the milk phase and we can provide no assurance that any of our products will do so in the future.

To date, our operating results have included a mix of products in the launch and sustain phases, and we expect such results to include a mix of products in all phases at any given period. Product mix can affect our gross profit and the variable portion of our sales and distribution expenses. Ultimately, we believe that the future cash flow generated by our products in the sustain phase will outpace the amount that we will reinvest into launching new products, driving profitability at the company level while we continue to invest in growth and technology. During the second quarter of 2020, we changed how we procure and order products, including our products in the launch phase, by reducing the targeted inventory on hand. For products in the launch phase in particular, we continue to manage our initial order quantities to reduce exposure related to product launches which do not meet expectations. This reduced order quantity may impact the time needed for a product to reach the sustain phase and may increase the cost of online advertising and other promotional programs related to product launches, but we believe this reduces the working capital impact from product launches, including those that may not meet expectations. In addition, we may shift our focus towards launching a fewer number of products that we believe have larger addressable market opportunities.

The following table shows the number of launches of new products included in our net revenue which have achieved, or are expected to achieve, more than $0.5 million in net revenue per year. The growth in our direct net revenue (i.e., direct-to-consumer sales) versus the comparable prior year period is the period over period growth of direct sales channel.

	Three Months Ended March 31,	
	2020	**2021**
Launches of new products	16	21
Growth in direct net revenue versus comparable previous year period	47.7%	83.1%

Our growth in direct revenue can be impacted by the timing and the season in which products are launched.

Financial Operations Overview

Net Revenue—We derive our revenue from the sale of consumer products, primarily in the United States. We sell products directly to consumers through online retail channels and through wholesale channels. Direct-to-consumer sales (i.e. direct net revenue), which is currently the majority of our revenue, is done through various online retail channels. We sell on Amazon.com, Walmart.com, and our own websites, with substantially all of our sales made through Amazon.com. For all of our sales and distribution channels, revenue is recognized when control of the product is transferred to the customer (i.e., when our performance obligation is satisfied), which typically occurs at the shipment date.

Cost of Goods Sold—Cost of goods sold is consists of the book value of inventory sold to customers during the reporting period. When circumstances dictate that we use net realizable value as the basis for recording inventory, we base our estimates on expected future selling prices, less expected disposal costs. The Office of the U.S. Trade Representative (“USTR”) has imposed additional tariffs on products imported from China. We contract manufacturers, predominantly in China, through purchase orders, for our consumer products. As such, this exposes us to risks associated with doing business globally, including changes in tariffs, which impact a significant number of our products. These increases may affect the way and the amount of product we order. If tariff increases are enacted in the future, our pricing actions are intended to offset the full gross margin impact from such tariffs. However, there are no assurances that these pricing actions will not reduce customer orders. Further, we can provide no assurances that future tariff increases will not be enacted.

Expenses

Research and Development Expenses—Research and development expenses include compensation and employee benefits for technology development employees, travel-related costs and fees paid to outside consultants related to the development of our intellectual property.

Sales and Distribution Expenses—Shipping and handling expenses are included in our consolidated statements of operations in sales and distribution expenses. This includes pick and pack costs and outbound transportation costs to ship goods to customers performed by e-commerce platforms or incurred directly by us, through our own direct fulfillment platform, which leverages AIMEE and our third-party logistics partners. Our sales and distribution expenses, specifically our logistics expenses and online advertising, will vary quarter to quarter as they are dependent on our sales volume, our product mix (i.e., products in the launch phase or sustain phase) and whether we fulfill products ourselves, i.e., fulfillment by merchant ("FBM"), or through e-commerce platform service providers, i.e., fulfillment by Amazon ("FBA"). After a product launches and reaches the sustain phase, we seek to maintain the product within its targeted level of profitability. This profitability can be impacted as each product has a unique fulfillment cost due to its size and weight. As such, products with less expensive fulfilment costs as a percentage of net revenue may allow for a lower gross margin, while still maintaining their targeted profitability level. Conversely, products with higher fulfillment costs will need to achieve a higher gross margin to maintain their targeted level of profitability. Throughout 2020, we added five FBM warehouses to our direct fulfillment platform, enabling FBM One Day Prime delivery for sales through Amazon, for approximately 76% of the U.S., based on our sales history. Expanding our third-party warehouse locations to have greater geographic reach, reduces the average last mile shipping zones to the end customer and as such our speed of delivery improves while our shipping costs to customers decreases, prior to the impacts in shipping providers rates.

General and Administrative Expenses—General and administrative expenses include compensation and employee benefits for executive management, finance administration, legal, and human resources, facility costs, insurance, travel, professional service fees and other general overhead costs, including the costs of being a public company.

Interest Expense, Net— Interest expense, net includes the interest cost from our credit facility and term loan, and includes amortization of deferred finance costs and debt discounts from our credit facility (the "Credit Facility") with MidCap Funding IV Trust ("MidCap") and our term loans with High Trail Investments SA LLC ("High Trail SA") and High Trail Investments ON LLC ("High Trail ON" and, together with High Trail SA, "High Trail").

Results of Operations

Comparison of the Three Months Ended March 31, 2020 and 2021

The following table summarizes our results of operations for the three months ended March 31, 2020 and 2021, together with the changes in those items in dollars and percentages:

	Three Months Ended March 31,		Change	
	2020	2021	Amount	%
	(in thousands, except percentages)			
Net revenue	$ 25,628	$ 48,136	$ 22,508	87.8%
Cost of goods sold	15,330	22,073	6,743	44.0
Gross profit	10,298	26,063	15,765	153.1
Sales and distribution expenses (1)	13,910	25,069	11,159	80.2
Research and development expenses (1)	2,281	2,124	(157)	(6.9)
General and administrative expenses (1)	8,003	10,976	2,973	37.1
Change in fair value of contingent earn-out liabilities	—	15,645	15,645	N/A
Operating loss	(13,896)	(27,751)	(13,855)	(99.7)
Interest expense, net	1,109	4,420	3,311	298.6
Change in fair market value of warrant liability	—	30,202	30,202	100.0
Loss on initial issuance of warrant	—	20,147	20,147	100.0
Other expense, net	25	33	8	32.0
Loss before income taxes	(15,030)	(82,553)	(67,523)	(449.3)
Provision for income taxes	—	—	—	—
Net loss	$ (15,030)	$ (82,553)	$ (67,523)	(449.3)%

(1) Amounts include stock-based compensation expense as follows:

	Three Months Ended March 31,	
	2020	2021
	(in thousands)	
Sales and distribution expenses	$ 1,592	$ 955
Research and development expenses	1,273	883
General and administrative expenses	4,574	5,061
Total stock-based compensation expense	$ 7,439	$ 6,899

The following table sets forth the components of our results of operations as a percentage of net revenue:

	Three Months Ended March 31,	
	2020	2021
Net revenue	100.0%	100.0%
Cost of goods sold	59.8%	45.9%
Gross margin	40.2%	54.1%
Sales and distribution expenses	54.3%	52.1%
Research and development expenses	8.9%	4.4%
General and administrative expenses	31.2%	22.8%
Change in fair value of contingent earn-out liabilities	0.0%	32.5%
Operating loss	(54.2)%	(57.7)%
Interest expense, net	4.3%	9.2%
Change in fair market value of warrant liability	0.0%	62.7%
Loss on initial issuance of warrant	0.0%	41.9%
Other expense (income), net	0.1%	0.1%
Loss before income taxes	(58.6)%	(171.6)%
Provision for income taxes	0.0%	0.0%
Net loss	(58.6)%	(171.6)%

Net Revenue

Revenue by Product Categories:

The following table sets forth our net revenue disaggregated by product categories:

	Three Months Ended March 31, 2020	Three Months Ended March 31, 2021	Change Amount	Change %
	(in thousands, except percentages)			
Direct	$ 25,208	$ 46,152	$ 20,944	83.1%
Wholesale	59	1,802	1,743	2954.2%
Managed PaaS	361	182	(179)	(49.6)%
Net revenue	$ 25,628	$ 48,136	$ 22,508	87.8%

Net revenue increased $22.5 million, or 87.8% during the three months ended March 31, 2021 compared to $25.6 million for the three months ended March 31, 2020. The increase in net revenue was primarily attributable to increased direct sales volume of $20.9 million, or an 83.1% increase, which increased due to increased pricing, growth in our existing sustain product portfolio, including new products obtained through acquisitions, new product launches in 2021 and the impact of products released in the second half of 2020. We also saw an increase in wholesale revenue of $1.7 million versus the corresponding period of the prior year primarily from the sale of PPE in the three months ended March 31, 2021. Finally, we saw a decrease in PaaS revenue of $0.2 million in the three months ended March 31, 2021.

	Three Months Ended March 31, 2020	Three Months Ended March 31, 2021
	(in thousands)	
Heating, cooling and air quality	$ 9,877	$ 6,138
Kitchen appliances	7,025	12,150
Health and beauty	4,430	3,642
Personal protective equipment	—	1,154
Cookware, kitchen tools and gadgets	994	6,098
Home office	498	809
Housewares	1,412	7,182
Essential oils and related accessories	—	7,353
Other	1,031	3,428
Total net product revenue	25,267	47,954
PaaS	361	182
Total net revenue	$ 25,628	$ 48,136

Heating, cooling and air quality accounted for $6.1 million in net revenue for the three months ended March 31, 2021 versus $9.8 million for the three months ended March 31, 2020 as sell-outs on inventory and certain wholesale revenue agreements led to decreased revenue in the period. Kitchen appliances accounted for $7.0 million in net revenue for the three months ended March 31, 2020 and accounted for $12.2 million in net revenue for the corresponding period in 2021, an increase of $5.2 million from new products launched and growth in our existing products during the three months ended March 31, 2021. Cookware, kitchen tools and gadgets accounted for approximately $1.0 million in net revenue for the three months ended March 31, 2020 and accounted for $6.1 million in net revenue for the corresponding period in 2021, an increase of $5.1 million from new products launched and growth in our existing products during three months ended March 31, 2021, including acquisitions. Net revenue from housewares increased approximately $5.8 million quarter-over-quarter from growth in our existing products and new products obtained through acquisitions. We started selling essential oils and related accessories in 2021 which generated $7.4 million in net revenue for the three months ended March 31, 2021.

Cost of Goods Sold and Gross Margin

	Three Months Ended March 31, 2020	Three Months Ended March 31, 2021	Change Amount	Change %
	(in thousands, except percentages)			
Cost of goods sold	$ 15,330	$ 22,073	$ 6,743	44.0%
Gross profit	$ 10,298	$ 26,063	$ 15,765	153.1%

The increase in cost of goods sold was primarily attributable to increased sales volume due to growth in our existing product portfolio and the impact of products released and our acquisitions.

Gross margin improved from 40.2% for the three months ended March 31, 2020 to 54.1% for the three months ended March 31, 2021. The improvement in gross margin was due to a decrease in overall cost of product mix result per unit as a result of increased sales prices and improved pricing from our manufacturers including favorable volume discounts, as well as greater margin contribution relating to new products obtained through acquisitions.

Sales and Distribution Expenses

	Three Months Ended March 31,		Change	
	2020	2021	Amount	%
	(in thousands, except percentages)			
Sales and distribution expenses	$ 13,910	$ 25,069	$ 11,159	80.2%

Sales and distribution expenses which included e-commerce platform commissions, online advertising and logistics expenses (i.e., variable sales and distribution expense), increased to $25.0 million for the three months ended March 31, 2021 from $13.9 million for the three months ended March 31, 2020. These increases are attributable primarily to the increase in the volume of products sold in the three months ended March 31, 2021. Our sales and distribution fixed costs (i.e. salary and office expenses) increased to $1.6 million for the three months March 31, 2021 from $1.3 million for the three months ended March 31, 2020 primarily due to an increase in headcount expenses versus prior period primarily for branding, marketing and customer service. Professional fees within sales and distribution expenses increased by $0.7 million due to acquisitions related costs including transition services. Sales and distribution expenses for the three months ended March 31, 2021 included a decrease in stock-based compensation expense of $0.6 million as compared to approximately $1.0 million from $1.6 million as compared to the prior quarter period due to the completion of expensing of certain tranches of restricted stock awards previously granted pursuant to the Aterian, Inc. 2019 Equity Plan (the “2019 Equity Plan”).

As a percentage of net revenue, sales and distribution expenses decreased to 52.1% for the three months ended March 31, 2021 from 54.3% for the three months ended March 31, 2020 primarily from the effects of our operating leverage from our technology platform as we continue to growth. E-commerce platform commissions, online advertising, selling and logistics expenses included within sales and distribution expenses, as a percentage of net revenue, were 45.2% for the three months ended March 31, 2021 as compared to 43.1% for the three months ended March 31, 2020, which slightly increased due to impacts on last mile shipping cost.

Research and Development Expenses

	Three Months Ended March 31,		Change	
	2020	2021	Amount	%
	(in thousands, except percentages)			
Research and development expenses	$ 2,281	$ 2,124	$ (157)	(6.9)%

The decrease in research and development expenses was primarily attributable to a decrease of stock-based compensation expense of $0.3 million due to the completion of expensing of certain tranches of restricted stock awards previously granted pursuant to the 2019 Equity Plan.

General and Administrative Expenses

	Three Months Ended March 31,		Change	
	2020	2021	Amount	%
	(in thousands, except percentages)			
General and administrative expenses	$ 8,003	$ 10,976	$ 2,973	37.1%

The increase in general and administrative expenses was primarily due to an increase of professional fees of approximately $1.2 million related to merger and acquisition costs including legal, audit and internal control related fees, an increase in stock-based compensation expense of approximately $0.5 million and an increase in intangibles amortization of approximately $1.2 million.

Change in fair value of contingent earn-out liabilities

	Three Months Ended March 31, 2020	2021	Change Amount	%
	(in thousands, except percentages)			
Change in fair value of contingent earn-out liabilities	$ —	$ 15,645	$ 15,645	100.0%

The increase in change in fair value of contingent earn-out liabilities was related to our acquisitions, which include re-assessment of the estimated fair value of contingent consideration as part of the purchase price, primarily driven by the increase of our share price since the date of each acquisition.

Interest expense, net

	Three Months Ended March 31, 2020	2021	Change Amount	%
	(in thousands, except percentages)			
Interest expense, net	$ 1,109	$ 4,420	$ 3,311	298.6%

The increase in interest expense was primarily related to the increase in loan interest compared to the prior period related to the senior secured promissory note due 2022 with an aggregate principal amount of $43.0 million issued on December 1, 2020 (as amended, the "December 2020 Note") and senior secured promissory note due 2023 in an aggregate principal amount of $16.5 million (as amended, the "February 2021 Note"), including the amortization of deferred financing fees, warrant discount and original issuance discount.

Change in fair market value of warrant liability

	Three Months Ended March 31, 2020	2021	Change Amount	%
	(in thousands, except percentages)			
Change in fair market value of warrant liability	$ —	$ 30,202	$ 30,202	100.0%
Loss on initial issuance of warrant	$ —	$ 20,147	$ 20,147	100.0%

The increase is attributable to the issuance of the warrants in connection with the December 2020 Note and the February 2021 Note and the change in the fair value of warrant liability and loss on initial issuance of warrant for the three months ended March 31, 2021, which was primarily driven by the increase of our share price since the issuance of the warrant.

Liquidity and Capital Resources

Cash Flows for the Three Months Ended March 31, 2020 and 2021

The following table provides information regarding our cash flows for the three months ended March 31, 2020 and 2021, respectively:

	Three Months Ended March 31, 2020	2021
	(in thousands)	
Cash used in operating activities	$ (17,091)	$ (8,495)
Cash used in investing activities	(18)	(15,300)
Cash provided by financing activities	803	38,501
Effect of exchange rate on cash	3	(99)
Net change in cash and restricted cash for period	$ (16,303)	$ 14,607

Net Cash Used in Operating Activities

Net cash used in operating activities was $17.1 million for the three months ended March 31, 2020, resulting from our net cash losses from operations of $7.1 million, compounded by cash used in working capital of $10.0 million from changes in accounts receivable, purchase of inventory and insurance and payments of accounts payable. Cash used in working capital for the three months ended March 31, 2020 is primarily related to the increase of accounts receivable during the period from increased sales late in the first quarter and increases in inventory associated with purchases made in anticipation of the reduction in manufacturing due to the Chinese New Year and in anticipation of our summer season when there is typically greater demand for our products.

Net cash used in operating activities was $8.5 million for the three months ended March 31, 2021, resulting from our net cash losses from operations of $4.6 million, offset by cash from working capital of $3.9 million from changes in accounts receivable, purchase of inventory and insurance and payments of accounts payable.

Net Cash Used in Investing Activities

For the three months ended March 31, 2021, net cash used in investing activities of $15.3 million was primarily from the acquisition of the assets of Healing Solutions, LLC for $15.3 million.

Net Cash Provided by Financing Activities

For the three months ended March 31, 2020, cash provided by financing activities of $0.8 million was primarily from borrowings under the Credit Facility of $17.4 million offset by repayments under the Credit Facility of $15.4 million, and repayments of insurance financing of $1.0 million.

For the three months ended March 31, 2021, cash provided by financing activities of $38.5 million was primarily from proceeds from cancellation of a warrant of $17.0 million, proceeds from warrant exercises of $8.9 million, proceeds from exercise of stock options of $8.7 million, borrowings from the Credit Facility of $14.5 million and borrowings from the February 2021 Note of $14.0 offset by repayments of the Credit Facility of $12.3 million and $4.7 million seller note repayments.

Sources of Liquidity

We are an early-stage growth company. Accordingly, we endeavor to continuously invest in the launch of new products, the development of our software, and the expansion of our sales and distribution infrastructure in order to accelerate revenue growth and scale operations to support such growth. We also intend to pursue growth through strategic acquisitions of digital native brands that have the potential to be quickly on-boarded onto our e-commerce platform. Our liquidity is materially influenced by the level of investment in our inventory and other working capital items; the size and number of acquisitions we close in any given period; and the availability of financing as described below.

Our principal sources of liquidity since inception have been through equity issuances, debt and cash flows from operations. Further, our recent acquisitions have been financed through a combination of cash on-hand or issuances of equity and/or debt. We believe we will continue to use such methods to finance future acquisitions.

As of March 31, 2021, we had approximately $35.0 million of cash and cash equivalents. Our forecasts, which include cash flows from our recent acquisitions, anticipate we will produce positive operating cash flows and we expect to maintain compliance with our financial covenants.

Non-GAAP Financial Measures

We believe that our financial statements and the other financial data included in this Quarterly Report on Form 10-Q have been prepared in a manner that complies, in all material respects, with generally accepted accounting principles in the United States (“GAAP”). However, for the reasons discussed below, we have presented certain non-GAAP measures herein.

We have presented the following non-GAAP measures to assist investors in understanding our core net operating results on an on-going basis: (i) Contribution margin; (ii) Contribution margin as a percentage of net revenue; (iii) Adjusted EBITDA; and (iv) Adjusted EBITDA as a percentage of net revenue. These non-GAAP financial measures may also assist investors in making comparisons of our core operating results with those of other companies.

As used herein, Contribution margin represents operating loss plus general and administrative expenses, research and development expenses, fixed sales, distribution expenses and amortization of inventory step-up from acquisitions (included in cost of goods sold). As used herein, Contribution margin as a percentage of net revenue represents Contribution margin divided by net revenue. As used herein, EBITDA represents net loss plus depreciation and amortization, interest expense, net and income tax expense. As used herein, Adjusted EBITDA represents EBITDA plus stock-based compensation expense, changes in fair-market value of earn-outs, amortization of inventory step-up from acquisitions (included in cost of goods sold), changes in fair-market value of warrant liability, loss on initial issuance of warrant, professional fees related to acquisitions, loss from extinguishment of debt and other expenses, net. As used herein, Adjusted EBTIDA as a percentage of net revenue represents Adjusted EBITDA divided by net revenue. Contribution margin, EBITDA and Adjusted EBITDA do not represent and should not be considered as alternatives to loss from operations or net loss, as determined under GAAP.

We present Contribution margin, Contribution margin as a percentage of net revenue, EBITDA, Adjusted EBITDA and Adjusted EBITDA as a percentage of net revenue because we believe each of these measures provides an additional metric to evaluate our operations and, when considered with both our GAAP results and the reconciliation to net loss, provides useful supplemental information for investors. We use Contribution margin, Contribution margin as a percentage of net revenue, EBITDA, Adjusted EBITDA and Adjusted EBITDA as a percentage of net revenue, together with financial measures prepared in accordance with GAAP, such as sales and gross margins, to assess our historical and prospective operating performance, to provide meaningful comparisons of operating performance across periods, to enhance our understanding of our operating performance and to compare our performance to that of our peers and competitors.

We believe EBITDA, Adjusted EBITDA and Adjusted EBITDA as a percentage of net revenue are useful to investors in assessing the operating performance of our business without the effect of non-cash items, while Contribution margin and Contribution margin as a percentage of net revenue are useful to investors in assessing the operating performance of our products as they represent our operating results without the effects of fixed costs and non-cash items. Contribution margin, Contribution margin as a percentage of net revenue, EBITDA, Adjusted EBITDA and Adjusted EBITDA as a percentage of net revenue should not be considered in isolation or as alternatives to net loss, loss from operations or any other measure of financial performance calculated and prescribed in accordance with GAAP. Neither EBITDA, Adjusted EBITDA nor Adjusted EBITDA as a percentage of net revenue should be considered a measure of discretionary cash available to us to invest in the growth of our business. Our Contribution margin, Contribution margin as a percentage of net revenue, EBITDA, Adjusted EBITDA and Adjusted EBITDA as a percentage of net revenue may not be comparable to similar titled measures in other organizations because other organizations may not calculate Contribution margin, EBITDA, Adjusted EBITDA or Adjusted EBITDA as a percentage of net revenue in the same manner as we do. Our presentation of Contribution margin and Adjusted EBITDA should not be construed as an inference that our future results will be unaffected by the expenses that are excluded from such terms or by unusual or non-recurring items.

We recognize that EBITDA, Adjusted EBITDA and Adjusted EBITDA as a percentage of net revenue, have limitations as analytical financial measures. For example, neither EBITDA nor Adjusted EBITDA reflects:

- our capital expenditures or future requirements for capital expenditures or mergers and acquisitions;
- the interest expense or the cash requirements necessary to service interest expense or principal payments, associated with indebtedness;
- depreciation and amortization, which are non-cash charges, although the assets being depreciated and amortized will likely have to be replaced in the future, or any cash requirements for the replacement of assets;
- changes in cash requirements for our working capital needs;
- changes in fair value of contingent earn-out liabilities, warrant liabilities, and amortization of inventory step-up from acquisitions (included in cost of goods sold) and transition costs from acquisitions.

Additionally, Adjusted EBITDA excludes non-cash expense for stock-based compensation, which is and is expected to remain a key element of our overall long-term incentive compensation package.

We also recognize that Contribution margin and Contribution margin as a percentage of net revenue have limitations as analytical financial measures. For example, Contribution margin does not reflect:

- general and administrative expense necessary to operate our business;
- research and development expenses necessary for the development, operation and support of our software platform;
- the fixed costs portion of our sales and distribution expenses including stock-based compensation expense;
- changes in fair value of contingent earn-out liabilities, warrant liabilities, and amortization of inventory step-up from acquisitions (included in cost of goods sold).

	Three Months Ended March 31,	
	2020	2021
	(in thousands, except percentages)	
Contribution margin	$ (755)	$ 6,134
Contribution margin as a percentage of net revenue	(2.9)%	12.7%
EBITDA	$ (13,880)	$ (76,929)
Adjusted EBITDA	$ (6,416)	$ (1,260)
Adjusted EBITDA as a percentage of net revenue	(25.0)%	(2.6)%

Contribution Margin

Contribution margin represents operating loss plus general and administrative expenses, research and development expenses, fixed sales and distribution expenses, changes in fair-market value of earn-outs and amortization of inventory step-up from acquisitions (included in cost of goods sold). Contribution margin as a percentage of net revenue represents Contribution margin divided by net revenue. The following table provides a reconciliation of Contribution margin to operating loss, which is the most directly comparable financial measure presented in accordance with GAAP.

	Three Months Ended March 31,	
	2020	2021
	(in thousands, except percentages)	
Operating loss	$ (13,896)	$ (27,751)
Add:		
General and administrative expenses	8,003	10,976
Research and development expenses	2,281	2,124
Sales and distribution fixed expenses, including stock-based compensation expense	2,857	3,332
Change in fair value of contingent earn-out liabilities	—	15,645
Amortization of inventory step-up from acquisitions (included in cost of goods sold)	—	1,808
Contribution margin	$ (755)	$ 6,134
Contribution margin as a percentage of net revenue	(2.9)%	12.7%

Adjusted EBITDA

EBITDA represents net loss plus depreciation and amortization, interest expense, net and income tax expense. Adjusted EBITDA represents EBITDA plus stock-based compensation expense, changes in fair-market value of earn-outs, amortization of inventory step-up from acquisitions (included in cost of goods sold), change in fair-market value of warrant liability, loss on initial issuance of warrant, professional fees related to acquisitions, loss from extinguishment of debt and other expenses, net. As used herein, Adjusted EBITDA as a percentage of net revenue represents Adjusted EBITDA divided by net revenue. The following table provides a reconciliation of EBITDA and Adjusted EBITDA to net loss, which is the most directly comparable financial measure presented in accordance with GAAP:

	Three Months Ended March 31,	
	2020	2021
	(in thousands, except percentages)	
Net loss	$ (15,030)	$ (82,553)
Add:		
Interest expense, net	1,109	4,420
Depreciation and amortization	41	1,204
EBITDA	(13,880)	(76,929)
Other expense (income), net	25	(33)
Change in fair value of contingent earn-out liabilities	—	15,645
Amortization of inventory step-up from acquisitions (included in cost of goods sold)	—	1,808
Change in fair market value of warrant liability	—	30,202
Loss on initial issuance of warrant	—	20,147
Professional fees related to acquisitions	—	449
Transition cost from Healing Solution acquisition	—	552
Stock-based compensation expense	7,439	6,899
Adjusted EBITDA	$ (6,416)	$ (1,260)
Adjusted EBITDA as a percentage of net revenue	(25.0)%	(2.6)%

COVID-19 Pandemic

On January 30, 2020, the World Health Organization (the “WHO”) announced a global health emergency because of a new strain of coronavirus (“COVID-19”) originating in Wuhan, China and the risks to the international community as the virus spreads globally beyond its point of origin. In March 2020, the WHO classified COVID-19 as a pandemic, based on the rapid increase in exposure globally. The full impact of the COVID-19 pandemic, including the impact associated with preventative and precautionary measures that we, other businesses and governments are taking, continues to evolve as of the date of this report. As such, the future impact on the our personnel, business and global operations, and on our suppliers, logistics providers, marketplaces and other business partners is uncertain and cannot be reasonably estimated at this time. Given the nature of the COVID-19 pandemic, it is possible that any and every aspect of our value chain could be disrupted, and such impact could have a material adverse impact on our business, financial condition, operating results and prospects. For example, with respect to certain products, we have been unable to replenish inventory or, ship into or receive inventory in its third-party warehouses, in each case on a timely basis. Further, in certain instances of we have had to delay the launch of new products due to sourcing and other supply chain constraints. We may also be unable to forecast demand for its products during the pendency of this pandemic and we may experience a substantial decrease in the demand for its products, most of which are considered not essential. In addition, the majority of our personnel are currently working remotely, which creates challenges in the way we operate our business, including, but not limited to, the manner in which we test products and our ability to meet our reporting obligations. Our ability to execute its operations could be further impacted if any of our key personnel contracts COVID-19. While the potential economic impact brought by, and the duration of, COVID-19 may be difficult to assess or predict, the continued widespread pandemic could result in significant disruption of global financial markets, reducing our ability to access capital, which could in the future negatively affect its liquidity. Due to the uncertainty as to the severity and duration of the pandemic, the impact on our future revenues, profitability, liquidity, financial condition, business and results of operations is uncertain at this time.

The COVID-19 pandemic began to have an unfavorable impact on us, including our key manufacturing partners, in January 2020. Substantially all of our products are sourced and manufactured in China, including new products that we expect to launch during the remainder of 2021. In addition, we rely on our team in Shenzhen for a number of functions relating to product sourcing and development, among other things. Our key manufacturing partner in China re-opened its facilities as of February 10, 2020 and reached and maintained over 90% capacity since early March 2020.

During the second quarter of 2020, we preserved our liquidity and capital resources through various actions, which included delaying and negotiating the delay of payments to certain vendors, and the effect of such actions did not have an adverse impact on our business, including our relationships with these vendors. Our operations rely on third-parties to manufacture our products, to provide logistics and warehousing services and to facilitate sales of our products, and accordingly we rely on the business continuity plans of these third parties to operate during the pandemic and have limited ability to influence their plans.

To date we have had few material overall negative impacts to our business and operations from the COVID-19 pandemic. As reported, we have seen 87.8% growth in our net revenue from direct sales for the three months ended March 31, 2021 versus the prior year. The shift of consumer spending from traditional retail to online spending has increased dramatically due to the COVID-19 pandemic. This has benefited us as historically over 90% of our revenues come from the sale of products online in the U.S. and we believe this shift to increased online consumer spending will continue even after the COVID-19 pandemic ends. Our investments in our infrastructure and software and our expansion of our third-party warehousing network have also allowed us to continue to deliver our products, even when Amazon itself limited its delivery services. We have had no material impacts to our vendor or other business relationships to date as we, in certain circumstances, have negotiated improved credit and other terms. Further, to our knowledge, to date, none of our key operations vendors has had any material negative impacts related to COVID-19 or changes that have negatively affected our business, our borrowing capabilities or financial covenants. During the first half of 2021, we are expecting some impacts to our margins as it relates to increased international freight demands, lack of ship containers and general international freight congestion due to the continued increase demand of goods being sold on ecommerce marketplaces. Further, we expect to see increases in last mile shipping costs as shipping providers continue to see increased demand due to the increase of goods sold on ecommerce marketplaces which stresses their delivery networks. We believe these short-term increases in cost to be primarily related to the COVID-19 pandemic. Though the COVID-19 pandemic is fluid and we are expecting certain short-term impacts in early 2021, we believe at this time that our business may continue to minimize the impact from this current pandemic given our ability to work remotely, continued consumer demand for products on e-commerce channels and the business continuity plans of our key manufacturing partners and other vendors. We believe this combination of factors may help to mitigate risk from the COVID-19 pandemic.

We continue to consider the impact of COVID-19 on the assumptions and estimates used when preparing these consolidated financial statements including inventory valuation, and the impairment of long-lived assets. These assumptions and estimates may change as the current situation evolves or new events occur and additional information is obtained. If the economic conditions caused by COVID-19 worsen beyond what is currently estimated by management, such future changes may have an adverse impact on our results of operations, financial position, and liquidity.

Off-Balance Sheet Arrangements and Variable Interest Entities

We have not entered any off-balance sheet arrangements and do not have any holdings in variable interest entities.

Critical Accounting Policies and Use of Estimates

Our unaudited condensed consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles ("GAAP"). The preparation of these unaudited condensed consolidated financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses and the related disclosures. We base our estimates on historical experience and on other assumptions that we believe to be reasonable under the circumstances. These estimates and assumptions form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

There have been no material changes to our critical accounting policies as compared to the critical accounting policies and significant judgments and estimates as disclosed in our Annual Report on Form 10-K filed with the SEC on March 16, 2021. For additional information, please refer to Note 2 of our condensed consolidated financial statements in this Quarterly Report on Form 10-Q.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

We are exposed to market risk related to changes in interest rates. Our primary exposure to market risk is interest rate sensitivity, which is affected by changes in the general level of U.S. interest rates, particularly because our investments, including cash equivalents, are in the form, or may be in the form of, money market funds or marketable securities and are or may be invested in U.S. Treasury and U.S. government agency obligations. Due to the short-term maturities and low risk profiles of our investment, an immediate 100 basis point change in interest rates would not have a material effect on the fair market value of our investments. We do not currently use or plan to use financial derivatives in our investment portfolio or engage in hedging transactions to manage our exposure to interest rate risk.

In addition, we previously had outstanding debt under the Credit Facility that bore interest. As of March 31, 2021, our outstanding indebtedness under the Credit Facility was approximately $14.3 million, which bore interest at a rate of LIBOR plus 5.75%. We do not believe that an immediate 10% increase in interest rates would have had a material effect on interest expense for the Credit Facility, and therefore we did not expect our operating results or cash flows to be materially affected to any degree by a sudden change in market interest. The High Trail Notes were at a fixed rate and as such we were not exposed to interest rate effects for those loans.

We are currently exposed to market risk related to changes in foreign currency exchange rates. We do not currently engage in hedging transactions to manage our exposure to foreign currency exchange rate risk as we do not currently believe our exposure is material. Sales outside of the United States represented less than 1% of our net revenue for each of the three months ended March 31, 2021 and 2020. Currently, our revenue-producing transactions are primarily denominated in U.S. dollars; however, as we continue to expand internationally, our results of operations and cash flows may increasingly become subject to fluctuations due to changes in foreign currency exchange rates. In periods when the U.S. dollar declines in value as compared to foreign currencies in which we incur expenses, our foreign-currency based expenses will increase when translated into U.S. dollars. In addition, future fluctuations in the value of the U.S. dollar may affect the price at which we sell our products outside the United States. To date, our foreign currency risk has been minimal, and we have not historically hedged our foreign currency risk; however, we may consider doing so in the future.

Inflation would generally affect us by increasing our cost of labor and overhead costs. We do not believe that inflation had a material effect on our business, financial condition or results of operations for the three months ended March 31, 2021 and 2020.

Item 4. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended) as of the end of the period covered by this Quarterly Report on Form 10-Q.

Based on the evaluation of our disclosure controls and procedures as of March 31, 2021, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective as of March 31, 2021.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting that occurred during the three months ended March 31, 2021 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Limitations on Effectiveness of Controls and Procedures

In designing and evaluating the disclosure controls and procedures and internal control over financial reporting, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. In addition, the design of disclosure controls and procedures and internal control over financial reporting must reflect the fact that there are resource constraints and that management is required to apply judgment in evaluating the benefits of possible controls and procedures relative to their costs.

PART II—OTHER INFORMATION

Item 1. Legal Proceedings.

We are not party to any material legal proceedings at this time. From time to time, we may become involved in various legal proceedings that arise in the ordinary course of business. We have in the past and may in the future become involved in private actions, collective actions, investigations and various other legal proceedings by clients, employees, suppliers, competitors, government agencies or others. We evaluate any claims and lawsuits with respect to their potential merits, our potential defenses and counter claims, and the expected effect on us of defending the claims and a potential adverse result. However, the results of any litigation, investigations or other legal proceedings are inherently unpredictable and expensive. Any claims against us, whether meritorious or not, could be time consuming, result in costly litigation, damage our reputation, require significant amounts of management time and divert significant resources. If any legal proceedings were to be determined adversely to us, or we were to enter into a settlement arrangement, we could be exposed to monetary damages or limits on our ability to operate our business, which could have an adverse effect on our business, financial condition and operating results.

Item 1A. Risk Factors.

You should carefully consider the factors discussed in Part I, Item 1A. "Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2020, filed with the SEC on March 16, 2021, which could materially affect our business, financial condition, cash flows or future results. The risks described in our Annual Report on Form 10-K for the year ended December 31, 2020 are not the only risks facing our company. Additional risks and uncertainties not currently known to us or that we currently deem to be immaterial also may materially adversely affect our business, financial condition or future results. Except as presented below, there have been no material changes from the risk factors associated with our business previously disclosed in our Form 10-K.

Risks Relating to Our Business

We have a short operating history in an evolving industry.

We have a short operating history in a rapidly evolving and highly competitive industry that may not develop in a manner favorable to our business. Our relatively short operating history makes it difficult to assess our future performance. You should consider our business and prospects in light of the risks and difficulties we may encounter.

Our future success will depend in large part upon our ability to, among other things:

- manage our inventory effectively;
- successfully develop, retain and expand our consumer product offerings and geographic reach;
- successfully acquire, operate and efficiently integrate third-party Amazon sellers;
- compete effectively;
- anticipate and respond to macroeconomic changes;
- effectively manage our growth;
- hire, integrate and retain talented people at all levels of our organization;
- avoid interruptions in our business from information technology downtime, cybersecurity breaches or labor stoppages;
- maintain the quality of our technology infrastructure and the quality of our consumer products;
- develop new features to enhance AIMEE's functionality; and
- retain our existing manufacturing vendors and attract new manufacturing vendors.

We have launched numerous products over the last several quarters and have experienced a lower than expected success rate of products reaching the sustain phase. In addition, in certain instances, even when a product has reached the sustain phase, our forecasts, at times, have resulted in inventory overages. During 2020, we launched our Holonix Health brand, which was developed to address the personal protective equipment and wellness product category in light of the COVID-19 pandemic. Our marketing strategy relies to a significant extent on our ability to sell such products on the Amazon marketplace and we can provide no assurances that we will be allowed to sell any such products on the Amazon marketplace or that we will be successful in selling our products in other sales channels. In addition, we have recently acquired several Amazon third-party sellers and we may be unable to sustain the level of financial performance relating to these acquisitions due to a variety of factors including changes in the competitive landscape of the product category and adverse actions of competing sellers.

In addition, our Platform as a Service ("PaaS") business is still nascent and we may be unable to successfully maintain or grow our PaaS business. We can provide no assurance that we will be successful in growing or retaining this business which would result in the loss of PaaS and associated revenues. If we fail to address the risks and difficulties that we face, including those associated with the challenges listed above as well as those described in the "PaaS" section and elsewhere in this "Risk Factors" section, our business, financial condition and our operating results will be adversely affected.

Starting in second half of 2020, the Company has initiated an accretive acquisition strategy to acquire Amazon sellers. While the opportunity to make such acquisitions is significant, we can provide no assurance that our acquisitions will ultimately be accretive in the longer term and we may experience operational challenges with respect to such acquisitions. For example, our Truweo acquisition has experienced numerous "black hat" attacks from competitors which has caused the financial performance of that business to decline.

We have significant operational exposure relating to the COVID-19 pandemic and the impact from this risk could have a material adverse impact on our business, financial condition, operating results and prospects.

Although we have seen an increase in our net revenue since March 2020 and through the date of this Annual Report, the future impact that the COVID-19 pandemic may have on our personnel, business and global operations, and on our suppliers, logistics providers, marketplaces and other business partners is uncertain and cannot be reasonably estimated at this time. Given the nature of the COVID-19 pandemic, it is possible that any and every aspect of our value chain could be disrupted, and such impact could have a material adverse impact on our business, financial condition, operating results and prospects. For example, in certain instances, we have been unable to launch new products, replenish inventory for existing products, ship into or receive inventory in our third-party warehouses or ship or sell products to customers, on a timely basis. During the fourth quarter of 2020 and first quarter of 2021, we have experienced production and shipment delays for certain of our products that could result in stock outs on the Amazon marketplace resulting in a decrease of net revenue. We also may be unable to forecast demand for our products during the pendency of this pandemic and we may experience a substantial decrease in the demand for our products, most of which are considered not essential. In addition, the majority of our personnel are currently working remotely which creates challenges in the way we operate our business, including with respect to the manner in which we ensure the quality of our products and meet our reporting obligations. Our ability to execute our operations could be impacted if any of our key personnel contracts COVID-19. While the potential economic impact brought by, and the duration of, COVID-19 may be difficult to assess or predict, the continued widespread pandemic could result in significant disruption of global financial markets, reducing our ability to access capital, which could in the future negatively affect our liquidity. Due to the uncertainty as to the severity and duration of the pandemic, the impact on our future revenues, profitability, liquidity, financial condition, business and results of operations is uncertain at this time.

While we have been preserving our liquidity and capital resources through various actions which include delaying and negotiating the delay of payments to certain vendors, the effect of such actions could have an adverse impact on our business, including our relationships with these vendors. For example, payment delays to certain of our manufacturing vendors in China during April 2020 had resulted in a temporary loss of availability of export credit insurance from the China Export & Credit Insurance Corporation ("Sinosure"), a Chinese state-owned enterprise, that provides export credit insurance to our manufacturing vendors. As of the date of this Annual Report, Sinosure has reinstated this insurance to levels that we believe are sufficient to fund our operations. In the future, we may not be able to maintain this insurance on a timely basis or at all, which would have a material impact on our working capital and our ability to fund our operations. In addition, our operations rely on third-parties to manufacture our products, to provide logistics and warehousing services and to facilitate sales of our products, and, accordingly, we rely on the business continuity plans of these third parties to operate during the pandemic and have limited ability to influence their plans. In light of the uncertainty as to the severity and duration of the pandemic, we may be unable to remain in compliance with the terms of our existing loan agreements and may be unable to secure a waiver which could have an adverse impact on our business, prospects and financial condition and we may seek additional financing options. Any financing, if successful may be expensive and/or dilutive.

Our current acquisition strategy may be limited by our ability to raise the funding we need to continue to support our growth strategy.

We may not be able to continue to acquire the financing needed in order to pursue our current acquisition strategy. The success of our business depends, in part, on our ability to invest significant resources in research, development of our proprietary technology platform, and product development, including through acquisitions. As we continue to make investments to grow our business, we may require additional funds from investors secured through issuances of equity or convertible debt securities. The debt we incur, at times, in order to retain these funds may negatively impact our financial conditions or operating results and may require the use of warrants and contain other terms such as the payment of stock instead of cash in the event of a default, that could be dilutive to stockholders. Consequently, investors or lenders may determine that our debt to equity ratio is unfavorable to their lending strategy and decide to forego financing, which could adversely affect our future operating results and ability to sustain profitability. In addition, sellers of acquisition targets may expect a larger component of deal consideration to be paid in cash instead of our common stock.

If we are unable to manage our inventory effectively, our operating results and financial condition could be adversely affected.

To ensure timely delivery of products, we generally issue purchase orders to contract manufacturers. As a result, we are vulnerable to demand and pricing shifts and to suboptimal selection and timing of product purchases. In the past, we have not always predicted the appropriate demand for our products by consumers with accuracy, which has resulted in inventory shortages, excess inventory write offs and lower gross margins. We rely on our procurement team to order products and we rely on our data analytics to decide on the levels and timing of inventory we purchase, including when to reorder items that are selling well and when to write off items that are not selling well. We rely on our contract manufacturers who are often responsible for conducting a number of traditional operations with respect to their respective products, including maintaining raw materials and inventory for shipment to us. In these instances, we may be unable to ensure that these suppliers will continue to perform these services to our satisfaction in a manner that provides our customer with an appropriate brand experience or on commercially reasonable terms. If so, our business, reputation and brands could suffer. If our sales and procurement teams do not accurately predict demand or if our algorithms do not help us reorder the right products or write off the right products timely, we may not effectively manage our inventory, which could result in inventory excess or shortages, and our operating results and financial condition could be adversely affected.

Given the long lasting effects of the COVID-19 pandemic, we expect to continue experiencing inventory shortages in the near term and our operating results and financial condition could be adversely affected.

Our business, including our costs and supply chain, is subject to risks associated with sourcing, manufacturing, shipping, importing and warehousing.

We currently source all of the products we offer from third-party vendors and, as a result, we may be subject to price fluctuations or supply disruptions. Our operating results would be negatively impacted by increases in the prices of our products, and we have no guarantees that prices will not rise. For example, in the first quarter of 2021, global prices for commodities such as plastic, aluminum, copper and steel have increased significantly. In addition, as we expand into new categories and product types, we expect that we may not have strong purchasing power in these new areas, which could lead to higher costs than we have historically seen in our current categories. We may not be able to pass increased costs on to customers, which could adversely affect our operating results. Moreover, in the event of a significant disruption in the supply of raw materials used in the manufacture of our products, the vendors that we work with might not be able to locate alternative suppliers of materials of comparable quality at an acceptable price. For example, natural disasters, unforeseen public health crises, such as epidemics and pandemics, have in the past increased raw material costs, impacting pricing with certain of our vendors, and caused shipping delays for certain of our products. As a result, our ability to receive inbound inventory efficiently and ship merchandise to clients may be negatively affected by such natural disasters, pandemics, labor disputes, acts of war or terrorism, and similar factors, whether occurring in the United States or internationally. For example, we receive and warehouse a portion of our inventory in California. If any such disaster were to impact this facility, our operations would be disrupted. In addition, these types of events could negatively impact consumer spending in the impacted regions. We rely on the business continuity plans of third parties to operate during natural disasters or pandemics, like the COVID-19 pandemic, and we have limited ability to influence their plans. The sourcing, manufacturing, importing or warehousing of our products could be significantly disrupted if a third-party does not have a business continuity plan or such business continuity plan does not adequately support our products or operations. Further capacity fluctuations driven by various factors such as seasonality, tariffs, fuel-related regulations affecting the shipping industry, hedging or other factors can cause importing delays, which can lead to volatility in ocean freight rates and availability, causing us to incur additional expense and adversely affecting our operating results. In addition, our third-party warehouse providers may not have sufficient capacity to store our goods or may seek to increase our pricing rates. Any delays, interruption, damage to or increased costs in the manufacture of the product we offer could result in higher prices to acquire the product or non-delivery of product altogether and could adversely affect our operating results.

In addition, we cannot guarantee that product we receive from vendors will be of sufficient quality or free from damage or defects, or that such merchandise will not be damaged during shipping or storage. While we take measures to ensure product quality and avoid damage, including evaluating vendor facilities, operations and product samples, conducting inventory inspections and inspecting returned product, we cannot control merchandise while it is out of our possession or prevent all damage while in our distribution centers. We may incur additional expenses and our reputation could be harmed if clients and potential clients believe that our merchandise is not of high quality or may be damaged.

We may not accurately forecast revenues, profitability and appropriately plan our expenses.

We base our current and future expense levels primarily on our operating forecasts and estimates of sales. Sales and operating results are difficult to forecast because they generally depend on a number of factors including our ability to launch new products on a timely basis and to accurately predict the success of those launches, which are uncertain. Additionally, our business is affected by general economic, business and other conditions around the world, in particular in the U.S. and China. We may be unable to adjust our spending in a timely manner to compensate for any unexpected shortfall in sales and operating results. If actual results differ from our estimates, our operating results and financial condition could be adversely impacted. In addition, during the second quarter of 2020, we began selling personal protective equipment ("PPE") to state and local governments in the U.S. The market for PPE is volatile and unpredictable, and we have limited experience sourcing and selling PPE. While we expect to continue to sell PPE, we can provide no assurances that we will be successful in selling products to such state and local governments or to private businesses, that the products we deliver will be of sufficient quality, the correct specifications or the goods secured at all and our cash deposits refunded, or that we will receive timely payment from the customer. For example, we recently entered into a settlement agreement with a vendor who did not timely supply product to us or refund our deposit after failing to timely supply us with the product. Pursuant to such settlement agreement, the vendor has agreed to make payments to us of $4.3 million in the aggregate in cash and product over the next six to nine months. While we expect these payments to be made timely in accordance with the settlement agreement, there can be no assurances that we will receive the payments or product on time or at all, which could adversely affect our business, financial condition and results of operations. In addition, any failure in successfully delivering product to state and local governments may harm our business relationships with these state and local governments, our product manufacturers and ultimately our reputation.

We may not be able to sustain our revenue growth rate.

Our recent revenue growth should not be considered indicative of our future performance. Specifically, our net revenue increased by 87.8% for the three months ended 2021 compared to 2020, and 43.6% for the three months ended 2020 compared to 2019. As we grow our business, our revenue growth rates may slow in future periods due to a number of reasons, which may include our inability to successfully launch new products that reach our sustain phase and to keep those products in the sustain phase or to grow our PaaS business, as well as the maturation of our business. Our revenue growth rates may also slow in future periods to the extent we are unable to identify and complete acquisitions, or are unable to maintain or grow revenues from such businesses after closing. We can provide no assurance that we will continue to be able to maintain or sustain the same levels of historic revenue growth.

We believe that during 2019 investors placed significant focus on the ability of certain private and newly public companies to demonstrate sustained profitability instead of continuing higher levels of revenue growth at the expense of profitability. We may decide to delay certain investments in order to more quickly achieve profitability, and while such decisions may accelerate profitability on a sustained basis, we can provide no assurance that we will continue to be able to maintain or sustain the same levels of historic revenue growth. In addition, we may reduce the number of new product launches in order to focus on product opportunities that have larger addressable markets but require increased levels of marketing investment and we can provide no assurances that such a shift will be successful.

In addition, in 2020, we experienced an increase in net revenue in part due to the shift by consumers to online shopping as a result of the COVID-19 pandemic. While we expect this shift to continue, we can provide no assurance that this shift will continue in the near or longer term or continue with respect to the products we offer.

We may require additional capital to support business growth, and this capital might not be available or may be available only by diluting existing stockholders.

As we continue to make investments, while balancing the need to achieve profitability, to support our business growth we may require additional funds to maintain, grow and respond to business challenges. Accordingly, we need to engage in equity or debt financings to secure additional funds. If we raise additional funds through further issuances of equity or convertible debt securities, we expect our existing stockholders to suffer significant dilution, and any new equity securities we issue could have rights, preferences and privileges superior to those of holders of our common stock. In addition, we may not be able to raise sufficient equity or equity-like capital without first seeking stockholder approval, which could limit our ability to complete such transaction, or to complete such transaction on a timely basis. Any debt financing secured by us in the future would require the consent of our existing lenders, and also could involve restrictive covenants relating to our capital-raising activities and other financial and operational matters, which may make it more difficult for us to obtain additional capital and to pursue business opportunities. In addition, we may not be able to obtain additional financing on terms favorable to us, if at all. If we are unable to obtain adequate financing or financing on terms satisfactory to us, when we require it, our ability to continue to maintain, grow and respond to business challenges and opportunities would be significantly limited, and our business and prospects could fail or be adversely affected. If we require additional borrowings in order to achieve continued growth, but are unable to satisfy conditions required by High Trail Investments SA LLC ("High Trail SA") or High Trail Investments ON LLC ("High Trail ON" and, together with High Trail SA, "High Trail"), we can provide no assurance that we will be able to access borrowings on terms that will be acceptable to us, or that we would be able to refinance the High Trail term loans, on terms acceptable to us, or at all. In addition, if we were to breach our existing term loans with High Trail, High Trail could exercise remedies against us which could result in our having to prepay our existing loans earlier than required and could result in significant dilution to stockholders.

We currently have an effective shelf registration statement on Form S-3 filed with the SEC. However, as further discussed in the risk factor "As a result of our failure to timely file certain financial statements relating to the Smash Assets, we are currently ineligible to file new short form registration statements on Form S-3, which may impair our ability to raise capital on terms favorable to us, in a timely manner or at all." in our Annual Report on Form 10-K, we are not currently permitted to use our existing registration statements on Form S-3. Absent a waiver of the Form S-3 eligibility requirements and assuming we continue to timely file our required reports under the Securities Exchange Act of 1934, as amended (the "Exchange Act") after certain financial statements (the "Smash Financial Statements") relating to our acquisition of assets of an e-commerce business under the brands Mueller, Pursteam, Pohl and Schmitt and Spiralizer (the "Smash Assets") are filed, the earliest we would regain the ability to use Form S-3 is 12 months from the date we file the Smash Financial Statements. At that time, we may use the shelf registration statement on Form S-3 to offer from time to time any combination of debt securities, common and preferred stock and warrants. In the interim, we intend to complete public offerings through the use of a Form S-1 registration statement and through privately placed financings and as a result we could experience a higher cost of capital and shareholders may experience increased dilution.

The terms of our revolving credit facility and term loans contain restrictive covenants that may limit our operating flexibility.

On April 8, 2021, we entered into a securities purchase and exchange agreement with High Trail SA and High Trail ON, pursuant to which, among other things, we agreed to issue and sell to High Trail, in a private placement transaction (i) senior secured promissory notes in an aggregate principal amount of $110,000,000 (the "Notes") that will accrue interest at a rate of 8% per annum and mature on April 8, 2024, and (ii) warrants to purchase up to an aggregate of 2,259,166 shares of the Company's common stock in exchange for: (a) a cash payment by High Trail to the Company of $57.7 million, (b) that certain senior secured promissory note in an aggregate original principal amount of $43.0 million issued by the Company to High Trail SA in December 2020, and (c) that certain senior secured promissory note in an aggregate original principal amount of $16.5 million issued by the Company to High Trail ON in February 2021.The Notes contain affirmative and restrictive covenants that limit our operating ability including to, among other things, transfer or dispose of assets, merge with other companies or consummate certain changes of control, pay dividends, incur additional indebtedness and liens and enter into new businesses. We therefore may not be able to engage in any of the foregoing transactions unless we obtain the consent of our lenders. In addition, the Notes are secured by all of our assets, and the Notes require us to satisfy certain covenants, including achieving certain adjusted EBITDA amounts. There is no guarantee that we will be able to meet our covenants or pay the principal and interest on any such debt. Furthermore, there is no guarantee that future working capital, borrowings or equity financing will be available to repay or refinance any such debt. Any inability to make scheduled payments, meet the financial or other covenants in the Notes or to refinance them would adversely affect our business. Further, at any time, if we violate the terms of the Notes or otherwise fail to meet our covenants, we may not be able to obtain a waiver from the lenders under satisfactory terms, if at all, which would limit our operating flexibility and/or liquidity and which would have an adverse effect on our business and prospects, and could also result in dilution to our shareholders in the event we are required to pay back the Notes using our common stock.

Risks Relating to Litigation and Government Regulation

A failure to comply with current laws, rules and regulations or changes to such laws, rules and regulations and other legal uncertainties may adversely affect our business, financial performance, results of operations or business growth.

Our business and financial performance could be adversely affected by unfavorable changes in or interpretations of existing laws, rules and regulations or the promulgation of new laws, rules and regulations applicable to us and our businesses, including those relating to the internet and e-commerce, internet advertising and price display, consumer protection, anti-corruption, antitrust and competition, economic and trade sanctions, energy usage and emissions, tax, banking, data security, network and information systems security, data protection and privacy. As a result, regulatory authorities could prevent or temporarily suspend us from carrying on some or all of our activities or otherwise penalize us if our practices were found not to comply with applicable regulatory or licensing requirements or any binding interpretation of such requirements. Unfavorable changes or interpretations could decrease demand for our products or services, limit marketing methods and capabilities, affect our margins, increase costs or subject us to additional liabilities.

For example, there are, and will likely continue to be, an increasing number of laws and regulations pertaining to the internet and e-commerce that may relate to liability for information retrieved from or transmitted over the internet, display of certain taxes and fees, online editorial and consumer-generated content, user privacy, data security, network and information systems security, behavioral targeting and online advertising, taxation, liability for third-party activities and the quality of services. Furthermore, the growth and development of e-commerce may prompt calls for more stringent consumer protection laws and more aggressive enforcement efforts, which may impose additional burdens on online businesses generally.

In May 2019, we received notice from the California Energy Commission (the "CEC") that certain of our products had not been listed in the CEC's Modernized Appliance Efficiency Database System (the "MAEDbS") and therefore we were not in compliance with a CEC regulation. In order for an appliance to be listed in the MAEDbS, it must be tested at a lab approved by the CEC and the test data must be submitted to the CEC's Appliance Efficiency Program. We settled this matter with the CEC on May 26, 2020 and agreed to pay a fine of $150,000, of which $75,000 was paid on June 1, 2020 and the remaining payment was made on July 1, 2020. If we are not in compliance with CEC regulations in the future, we may not be permitted to sell certain products in the State of California or may be required to pay a penalty fee to the CEC.

In September 2019, we received a Test Notice from the U.S. Department of Energy (“DOE”) indicating that a certain dehumidifier model may not comply with applicable energy-conservation standards. The DOE requested that we provide it with several model units for DOE testing. If it is determined that we have violated certain energy-conservation standards, we could be fined pursuant to DOE guidelines, and this civil penalty may be material to our consolidated financial statements. We intend to vigorously defend ourselves. We have submitted to the DOE testing process, made a good-faith effort to provide necessary notice as practicable, and included in a formal response copies of the energy-efficiency report and certification that were issued for the dehumidifier model at the time of production. We believe this product is compliant, and we, in conjunction with our manufacturing partner, have disputed the Test Notice received from the DOE. As of the date hereof, we cannot reasonably estimate what, if any, penalties may be levied.

In September 2019, we received notice from the U.S. Environmental Protection Agency (“EPA”) that certain of our products were identified by the Association of Home Appliance Manufacturers (“AHAM”) as failing to comply with EPA ENERGY STAR requirements. For an appliance to be ENERGY STAR certified, it must meet standards promulgated by the EPA and enforced through EPA-accredited certification bodies and laboratories. We believe that our products are compliant, and we, in conjunction with our manufacturing partner, have disputed the AHAM testing determination pursuant to EPA guidelines. While a resolution remains pending, we are not selling or marketing the products identified by the EPA. We cannot be certain that these products will eventually be certified by AHAM and the EPA, and we may incur costs that cannot presently be calculated in the event that we need to make changes to the manner in which these products are manufactured and sold.

In April 2020, we received notice from the EPA with respect to regulatory compliance and advertising associated with certain of our dehumidifier products. We believe that our products and the associated advertising are compliant, and we are currently in discussions with the EPA to resolve the matter. The EPA had placed a hold on the sale of certain of our dehumidifier inventory while it reviewed the matter with us. As of October 2020, we are able to resume selling the products identified by the EPA, and discussions are continuing with the EPA. No penalty has been assessed by the EPA or communicated to us. If we receive a similar notice from the EPA in the future with regards to regulatory compliance of any of our other products, the EPA may place a hold on the sale of our products while it reviews an open matter with us.

We cannot be certain of the outcome with the EPA, and we may incur costs and penalties that cannot presently be calculated in the event that we are unable to resolve this matter with the EPA. Notwithstanding the above, we have deemed it appropriate to record an accrual for a potential fine. The final costs and penalties, if any, may be material with respect to our financial condition once determined.

Risks Relating to the Ownership of our Common Stock

Our share price may be volatile. Market volatility may affect the value of an investment in our common stock and could subject us to litigation.

Technology stocks have historically experienced high levels of volatility. There has been and could continue to be significant volatility in the market price and trading volume of equity securities. For example, our closing stock price ranged from $17.20 to $15.28 per share from January 4, 2021 to May 7, 2021.The market price of our common stock could be subject to wide fluctuations in response to many risk factors listed in this section, and others beyond our control, including:

- actual or perceived impact on our business due to the COVID-19 pandemic;
- actual or anticipated fluctuations in our financial condition and operating results;
- the financial projections we may provide to the public, and any changes in projected operational and financial results;
- addition or loss of significant customers;
- changes in laws or regulations applicable to our products;
- actual or anticipated changes in our growth rate relative to our competitors;
- announcements of technological innovations or new offerings by us or our competitors;
- announcements by us or our competitors of significant acquisitions, strategic partnerships, joint ventures or capital-raising activities or commitments;
- additions or departures of key personnel;
- changes in our financial guidance or securities analysts’ estimates of our financial performance;
- discussion of us or our stock price by the financial press and in online investor communities;
- reaction to our press releases and filings with the SEC;
- changes in accounting principles;
- lawsuits threatened or filed against us;
- fluctuations in operating performance and the valuation of companies perceived by investors to be comparable to us;

- sales of our common stock by us or our stockholders;
- share price and volume fluctuations attributable to inconsistent trading volume levels of our shares;
- price and volume fluctuations in the overall stock market, including as a result of trends in the economy as a whole;
- changes in laws or regulations applicable to our business;
- changes in our capital structure, such as future issuances of debt or equity securities;
- short sales, hedging and other derivative transactions involving our capital stock;
- the expiration of contractual lock-up periods, including in connection with acquisition transactions;
- sales of common stock by our executives;
- other events or factors, including those resulting from pandemics, war, incidents of terrorism or responses to these events; and
- general economic and market conditions.

Furthermore, in recent years, the stock markets have experienced extreme price and volume fluctuations that have affected and continue to affect the market prices of equity securities of many companies, and technology companies in particular. These fluctuations often have been unrelated or disproportionate to the operating performance of those companies. These broad market and industry fluctuations, as well as general economic, political and market conditions such as recessions, interest rate changes or international currency fluctuations, may negatively impact the market price of our common stock. In the past, companies that have experienced volatility in the market price of their stock have been subject to securities class action litigation. We may be the target of this type of litigation in the future. Securities litigation against us could result in substantial costs and divert our management's attention from other business concerns, which could also harm our business.

Future sales and issuances of our capital stock, or the perception that such sales may occur, could cause our stock price to decline.

We may issue additional securities following the date of this Quarterly Report on Form 10-Q. Our amended and restated certificate of incorporation, as amended, authorizes us to issue up to 500,000,000 shares of common stock and 10,000,000 shares of undesignated preferred stock. Future sales and issuances of our capital stock or rights to purchase our capital stock could result in substantial dilution to our existing stockholders. We may sell common stock, convertible securities and other equity securities in one or more transactions at prices and in a manner as we may determine from time to time. If we sell any such securities in subsequent transactions, the ownership of existing stockholders will be diluted, possibly materially. New investors in subsequent transactions could also gain rights, preferences and privileges senior to those of existing holders of our common stock.

Future sales of substantial amounts of our common stock in the public market could reduce the prevailing market prices for our common stock. Substantially all of our outstanding common stock is eligible for sale as are shares of common stock issuable under vested and exercisable stock options. If our existing stockholders sell a large number of shares of our common stock, or the public market perceives that existing stockholders might sell shares of common stock, the market price of our common stock could decline significantly. Existing stockholder sales might also make it more difficult for us to sell additional equity securities at a time and price that we deem appropriate, or at all.

We expect to continue to issue shares of our common stock in connection with acquisitions which could result in substantial dilution in the event such acquisitions are not accretive. In connection with the acquisition of the Smash Assets, we issued 4,220,000 shares of common stock, which we agreed to register for resale with the SEC. In connection with the acquisition of certain assets of Healing Solutions, LLC, we issued 1,387,759 shares of common stock, which we agreed to register for resale with the SEC. In addition, pursuant to a letter agreement with High Trail SA entered into on February 8, 2021, as amended, we agreed to prepare and file by June 30, 2021 a registration statement with the SEC for the purpose of registering for resale 980,000 shares of common stock issued to High Trail SA pursuant to the exercise of a warrant and 1,884,133 shares of common stock underlying a warrant issued to High Trail SA. Further, on April 8, 2021, pursuant to a letter agreement with High Trail SA and High Trail ON, we agreed to prepare and file by June 30, 2021 a registration statement with the SEC for the purpose of registering for resale 130,000 shares of common stock issued to High Trail SA. On April 8, 2021, in connection with the issuance of the Notes, we agreed to prepare and file by June 30, 2021 a registration statement with the SEC for the purpose of registering for resale 2,259,166 shares of common stock underlying warrants issued to High Trail SA and High Trail ON. Registration of these shares under the Securities Act of 1933, as amended (the "Securities Act") will result in such shares becoming freely tradable without restriction under the Securities Act, subject to certain other conditions. Any sale of these shares could have a materially adverse effect on the trading price of our common stock.

The concentration of our stock ownership will likely limit your ability to influence corporate matters, including the ability to influence the outcome of director elections and other matters requiring stockholder approval.

As of May 5, 2021, our executive officers, directors and the holders of more than 5% of our outstanding common stock in the aggregate beneficially own approximately 44.2% of our common stock. This concentrated control limits your ability to influence corporate matters for the foreseeable future. As a result, these stockholders, acting together, will have significant influence over all matters that require approval by our stockholders, including the election of directors and approval of significant corporate transactions. Corporate actions might be taken even if other stockholders oppose them. Additionally, these stockholders may cause us to make strategic decisions or pursue acquisitions that could involve risks to you or may not be aligned with your interests. This concentration of ownership might also have the effect of delaying or preventing a change of control of our company that other stockholders may view as beneficial. This control may materially adversely affect the market price of our common stock. In addition, as further described below, we have entered into voting agreements with a number of parties in connection with its initial public offering and in connection with acquisition transactions. We may elect to release one or more parties from voting agreements which could also limit your ability to influence corporate matters for the foreseeable future.

MV II, LLC, Dr. Larisa Storozhenko and Mr. Maximus Yaney (collectively, the “Designating Parties”) have entered into a voting agreement with Asher Delug and us (the “Restated Voting Agreement”), pursuant to which each of the Designating Parties agreed to relinquish the right to vote their shares of capital stock of, and any other equity interest in, us (collectively, the “Voting Interests”) by granting our board of directors the sole right to vote all of the Voting Interests as the Designating Parties’ proxyholder. The Voting Interests include all shares of our common stock currently held by the Designating Parties, as well as any of our securities or other equity interests acquired by the Designating Parties in the future. Pursuant to the proxy granted by the Designating Parties, our board of directors is required to vote all of the Voting Interests in direct proportion to the voting of the shares and equity interests voted by all holders other than the Designating Parties. The proxy granted by the Designating Parties under the Restated Voting Agreement is irrevocable. In addition, the Restated Voting Agreement proxyholder may not be changed unless we receive the prior approval of The Nasdaq Stock Market LLC.

The Restated Voting Agreement became effective on June 12, 2019, and it will continue until the earlier to occur of (a) a Deemed Liquidation Event unless, immediately upon such Deemed Liquidation Event, our common stock is and remains listed on The Nasdaq Stock Market LLC, or (b) Mr. Yaney’s death. For purposes of the Restated Voting Agreement, a “Deemed Liquidation Event” means (i) the acquisition of us by another entity by means of any transaction or series of related transactions to which we are party other than a transaction or series of transactions in which the holders of our voting securities outstanding immediately prior to such transaction or series of transactions retain, immediately after such transaction or series of transactions, as a result of our shares held by such holders prior to such transaction or series of transactions, a majority of the total voting power represented by our outstanding voting securities or such other surviving or resulting entity; (ii) a sale, lease or other disposition of all or substantially all of our and our subsidiaries’ assets taken as a whole by means of any transaction or series of related transactions, except where such sale, lease or other disposition is to a wholly-owned subsidiary of us; or (iii) any liquidation, dissolution or winding up of us, whether voluntary or involuntary; however, a Deemed Liquidation Event shall not include any transaction effected primarily to raise capital for us or a spin-off or similar divestiture of our product or PaaS business as part of a reorganization of us approved by our board of directors. In addition, the rights and obligations under the Restated Voting Agreement will terminate with respect to shares of capital stock sold by a Designating Party in connection with any arm’s length transaction to a third-party that is not a Designating Party, an affiliate of a Designating Party or any other individual or party that has a direct or indirect familial relationship with any Designating Party.

On December 1, 2020, 9830 Macarthur LLC (“9830”), one of the sellers of the Smash Assets, entered into a lock-up, voting and standstill agreement with us, pursuant to which 9830 agreed that until December 1, 2025, 9830 will, among other things, vote at each annual or special meeting of our stockholders all shares of common stock held by 9830 in accordance with the recommendations of our board of directors on each matter presented to our stockholders at such meeting.

On February 2, 2021, Healing Solutions, LLC (“Healing Solutions”), the seller of the Healing Solutions Assets, entered into a lock-up, voting and standstill agreement with us, pursuant to which Healing Solutions agreed that until August 2, 2021, Healing Solutions will, among other things, vote at each annual or special meeting of our stockholders all shares of common stock held by Healing Solutions in accordance with the recommendations of our board of directors on each matter presented to our stockholders at such meeting.

Short sellers of our stock may be manipulative and may drive down the market price of our common stock.

Short selling is the practice of selling securities that the seller does not own but rather has borrowed or intends to borrow from a third party with the intention of buying identical securities at a later date to return to the lender. A short seller hopes to profit from a decline in the value of the securities between the sale of the borrowed securities and the purchase of the replacement shares, as the short seller expects to pay less in that purchase than it received in the sale. Since it is in the short seller’s interest for the price of the stock to decline, some short sellers publish, or arrange for the publication of, opinions or characterizations regarding the relevant issuer, its business prospects and similar matters calculated to or which may create negative market momentum, which may permit them to obtain profits for themselves as a result of selling the stock short. Issuers whose securities have historically had limited trading volumes and/or have been susceptible to relatively high volatility levels can be particularly vulnerable to such short seller attacks. On May 4, 2021, Culper Research published a report that contained various false allegations against us, which has driven down the market price of our common stock. Culper Research disclosed that it had accumulated a short position in our common stock prior to the publication of the article.

Although we have timely responded to the false allegations set forth in the Culper Research article, we cannot assure you that false, misleading and/or defamatory articles will not be published again in the future. The publication of any such commentary regarding us in the future may bring about a temporary, or long term, decline in the market price of our common stock. No assurances can be made that similar declines in the market price of our common stock will not occur in the future, in connection with such commentary by short sellers or otherwise.

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

(a) Unregistered Sales of Equity Securities

None.

(b) Use of Proceeds from Registered 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	Incorporated by Reference Form	File Number	Filing Date	Exhibit
2.1†	Asset Purchase Agreement, dated February 2, 2021, by and among (i) Mohawk Group Holdings, Inc. and Truweo, LLC, as Purchaser, (ii) Healing Solutions, LLC, (iii) Jason R. Hope, and (vi) for the purposes of Section 5.11 and Article VII, Super Transcontinental Holdings LLC.	8-K	001-38937	2/3/2021	2.1
3.1	Amended and Restated Certificate of Incorporation of Mohawk Group Holdings, Inc.	8-K	001-38937	6/14/2019	3.1
3.2	Certificate of Amendment to Amended and Restated Certificate of Incorporation of the Company.	8-K	001-38937	4/30/2021	3.1
3.3	Certificate of Correction of Certificate of Amendment to the Amended and Restated Certificate of Incorporation of the Company.	8-K	001-38937	4/30/2021	3.2
3.4	Second Amended and Restated Bylaws of Aterian, Inc.	8-K	001-38937	4/30/2021	3.3
4.1	Form of Common Stock Certificate.	S-1/A	333-231381	5/24/2019	4.1
4.2+	Form of Registration Rights Agreement, dated as of April 6, 2018, among Mohawk Group Holdings, Inc. and the purchasers party thereto.	S-1	333-231381	5/10/2019	4.2
4.3	Warrant to Purchase Stock, issued to MidCap Financial Trust on September 4, 2018.	S-1	333-231381	5/10/2019	4.3
4.4	Form of Warrant, issued to Katalyst Securities LLC and its assigns on September 4, 2018.	S-1	333-231381	5/10/2019	4.4
4.4	Form of Warrant, issued to Horizon Technology Finance Corporation on December 31, 2018.	S-1	333-231381	5/10/2019	4.5
4.6	Amendment No. 1 to Registration Rights Agreement, dated as of March 2, 2019, among Mohawk Group Holdings, Inc. and the investors party thereto.	S-1	333-231381	5/10/2019	4.6
4.7	Warrant to Purchase Shares of Common Stock, issued to Third Creek Advisors, LLC on August 18, 2020.	10-Q	001-38937	11/9/2020	4.7
4.8	Form of Senior Secured Note due 2022.	8-K	001-38937	12/1/2020	4.1
4.9	Form of Senior Secured Note due 2023.	8-K	001-38937	2/3/2021	4.1
4.10	Form of Warrant to Purchase Common Stock, dated February 2, 2021.	8-K	001-38937	2/3/2021	4.2
4.11	Amendment to Senior Secured Note due 2022 and Securities Purchase Agreement, dated as of February 2, 2021.	8-K	001-38937	2/3/2021	4.3
4.12	Amendment to Warrant to Purchase Common Stock, dated as of February 2, 2021.	8-K	001-38937	2/3/2021	4.4
4.13	Form of Warrant to Purchase Common Stock (Penny Warrant), dated February 9, 2021.	8-K	001-38937	2/9/2021	4.1

4.14	Form of Warrant to Purchase Common Stock, dated February 9, 2021.	8-K	001-38937	2/9/2021	4.2
4.15	Second Amendment to Senior Secured Note due 2022, dated as of February 8, 2021.	8-K	001-38937	2/9/2021	4.3
4.16	First Amendment to Senior Secured Note due 2023, dated as of February 8, 2021.	8-K	001-38937	2/9/2021	4.4
4.17	Amendment to Warrant to Purchase Common Stock, dated as of February 8, 2021.	8-K	001-38937	2/9/2021	4.5
4.18	Form of Senior Secured Note due 2024.	8-K	001-38937	4/9/2021	4.1
4.19	Form of Warrant to Purchase Common Stock, dated April 8, 2021.	8-K	001-38937	4/9/2021	4.2
4.20	Amendment to Warrant to Purchase Common Stock issued on February 2, 2021, dated as of April 8, 2021.	8-K	001-38937	4/9/2021	4.3
4.21	Amendment to Warrant to Purchase Common Stock issued on February 8, 2021 (Penny Warrant), dated as of April 8, 2021.	8-K	001-38937	4/9/2021	4.4
4.22	Amendment to Warrant to Purchase Common Stock issued on February 8, 2021, dated as of April 8, 2021.	8-K	001-38937	4/9/2021	4.5
10.1+	Securities Purchase Agreement, dated as of February 2, 2021, by and among Mohawk Group Holdings, Inc. and each of the investors listed on the Schedule of Buyers attached thereto.	8-K	001-38937	2/3/2021	10.1
10.2+	Limited Consent and Amendment No. 10 to Amended and Restated Credit Agreement, dated as of February 2, 2021, by and among Mohawk Group Holdings, Inc., Mohawk Group, Inc., certain subsidiaries of Mohawk Group, Inc., set forth on the signature pages thereto, MidCap Funding IV Trust, as agent, and the lenders party thereto.	8-K	001-38937	2/3/2021	10.2
10.3	Lock-Up, Voting and Standstill Agreement, dated February 2, 2021, by and between Mohawk Group Holdings, Inc. and Healing Solutions, LLC.	8-K	001-38937	2/3/2021	10.3
10.4+	Manufacturing Supply Agreement, dated February 2, 2021, by and between Mohawk Group, Inc. and Healing Solutions, LLC.	8-K	001-38937	2/3/2021	10.4
10.5+	Consulting Agreement, dated February 2, 2021, by and between Mohawk Group, Inc. and Richard Perry.	8-K	001-38937	2/3/2021	10.5
10.6+	Consulting Agreement, dated February 2, 2021, by and between Mohawk Group, Inc. and Christopher Marshall.	8-K	001-38937	2/3/2021	10.6

10.7+	Consulting Agreement, dated February 2, 2021, by and between Mohawk Group, Inc. and Quinn McCullough.	8-K	001-38937	2/3/2021	10.7
10.8+	Transition Services Agreement, dated February 2, 2021, by and between Healing Solutions, LLC and Truweo, LLC.	8-K	001-38937	2/3/2021	10.8
10.9+	Letter Agreement, dated February 8, 2021, by and between Mohawk Group Holdings, Inc. and High Trail Investments SA LLC.	8-K	001-38937	2/9/2021	10.1
10.10	Form of Voting Agreement, dated February 8, 2021.	8-K	001-38937	2/9/2021	10.2
31.1*	Certification of the Principal Executive Officer pursuant to Rule 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934.				
31.2*	Certification of the Principal Financial Officer pursuant to Rule 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934.				
32.1**	Certification of the Principal Executive Officer and Principal Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				
101.INS*	Inline XBRL Instance Document.				
101.SCH*	Inline XBRL Taxonomy Extension Schema Document.				
101.CAL*	Inline XBRL Taxonomy Extension Calculation Linkbase Document.				
101.DEF*	Inline XBRL Taxonomy Extension Definition Linkbase Document.				
101.LAB*	Inline XBRL Taxonomy Extension Label Linkbase Document.				
101.PRE*	Inline XBRL Taxonomy Extension Presentation Linkbase Document.				
104*	Cover Page Interactive Data File (embedded within the Inline XBRL)				

* Filed herewith.

** Furnished herewith.

\+ Non-material schedules and exhibits have been omitted pursuant to Item 601(a)(5) of Regulation S-K. The Company hereby undertakes to furnish supplemental copies of any of the omitted schedules and exhibits upon request by the Securities and Exchange Commission.

† Non-material schedules and exhibits have been omitted pursuant to Item 601(b)(2) of Regulation S-K. The Company hereby undertakes to furnish supplemental copies of any of the omitted schedules and exhibits upon request by the Securities and Exchange Commission.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this Quarterly Report on Form 10-Q to be signed on its behalf by the undersigned thereunto duly authorized.

ATERIAN, INC.

Date: May 10, 2021	By: /s/ Yaniv Sarig Yaniv Sarig *Chief Executive Officer and Director* *(Principal Executive Officer)*
Date: May 10, 2021	By: /s/ Arturo Rodriguez Arturo Rodriguez *Chief Financial Officer* *(Principal Accounting and Financial Officer)*

EXHIBIT 31.1

CERTIFICATION PURSUANT
TO RULE 13a-14(a) UNDER
THE SECURITIES EXCHANGE ACT OF 1934

I, Yaniv Sarig, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Mohawk Group Holdings, Inc.;

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

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

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

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

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

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

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

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

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

Date: May 10, 2021

/s/ Yaniv Sarig
Yaniv Sarig
Chief Executive Officer
(Principal Executive Officer)

EXHIBIT 31.2

CERTIFICATION PURSUANT
TO RULE 13a-14(a) UNDER
THE SECURITIES EXCHANGE ACT OF 1934

I, Fabrice Hamaide, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Mohawk Group Holdings, Inc.;

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

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

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

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

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

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

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

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

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

Date: May 10, 2021

/s/ Arturo Rodriguez
Arturo Rodriguez
Chief Financial Officer
(Principal Financial Officer)

EXHIBIT 32.1

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

In connection with the Quarterly Report on Form 10-Q of Mohawk Group Holdings, Inc. (the “Company”) for the period ended March 31, 2021 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), the undersigned hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, to their knowledge that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

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

/s/ Yaniv Sarig	/s / Arturo Rodriguez
Yaniv Sarig	Arturo Rodriguez
Chief Executive Officer	Chief Financial Officer
(Principal Executive Officer)	*(Principal Financial Officer)*
May 10, 2021	May 10, 2021

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

This certification accompanies the Report, is not deemed filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the Exchange Act), or otherwise subject to the liability of that section, nor shall it be deemed incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Exchange Act (whether made before or after the date of the Report), irrespective of any general incorporation language contained in such filing.