(Exact name of registrant as specified in its charter)

Delaware

State or other jurisdiction of incorporation or organization

06-1393453

(I.R.S. Employer Identification No.)

1641 Fiske Place Oxnard, CA 93033

(Address of principal executive offices) (Zip Code)

Index to Financial Statements

Audited Consolidated Financial Statements

Reports of Independent Registered Public Accounting Firm	<u>2</u>
Consolidated Balance Sheets as of December 31, 2022 and 2021	<u>3</u>
Consolidated Statements of Comprehensive Income (Loss) for the years ended December 31, 2022 and 2021	<u>4</u>
Consolidated Statements of Stockholders' Equity for the years ended December 31, 2022 and 2021	<u>5</u>
Consolidated Statements of Cash Flows for the years ended December 31, 2022 and 2021	<u>6</u>
Notes to Consolidated Financial Statements	<u>7</u>



REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of CDTi Advanced Materials, Inc.

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheet of CDTi Advanced Materials, Inc. (the Company) as of December 31, 2022 and 2021, and the related consolidated statements of comprehensive income (loss), stockholders' equity, and cash flows for the years ended December 31, 2022 and 2021, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Company as of December 31, 2022 and 2021, and the results of its operations and its cash flows for the years ended December 31, 2022 and 2021, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's consolidated financial statements based on our audit. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) "PCAOB" and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB and in accordance with auditing standards generally accepted un the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audit, we are required to obtain an understanding of internal control over financial reporting, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audit included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audit also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audit provides a reasonable basis for our opinion.

Critical Audit Matters

Critical audit matters are matters arising from the current period audit of the consolidated financial statements that were communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the consolidated financial statements and (2) involved our especially challenging, subjective, or complex judgments. We determined that there are no critical audit matters.

Rose, Snyder & Jacobs LLP

Encino, California

We have served as the Company's auditor since 2017 April 28, 2023



Consolidated Balance Sheets (in thousands, except share and per share amounts)

	December 31,			1,
		2022		2021
ASSETS				
Current assets:				
Cash	\$	1,304	\$	\$1,460
Accounts receivable, net of allowance for doubtful accounts of \$70		1,344		1,221
Inventories		1,040		909
Prepaid expenses and other current assets		63		346
Total current assets		3,751		3,936
Property and equipment, net		204		206
Intangible assets, net		261		404
Right-of-use assets, operating lease		757		_
Other assets		104		120
Total assets	\$	5,077	\$	\$4,666
LIABILITIES AND STOCKHOLDERS' EQUITY	- -			
Current liabilities:				
Accounts payable	\$	474	\$	682
Accrued expenses and other current liabilities		850		1,083
Operating lease liability, current		168		_
Liability for income taxes		898		861
Total current liabilities		2,390		2,626
Operating lease liability, net of current portion		595		
Total liabilities		2,985		2,626
Commitments and contingencies (Note 12)				
Stockholders' equity:				
Preferred stock, par value \$0.01 per share: authorized 100,000; no shares issued and outstanding		_		
Common stock, par value \$0.01 per share: 50,000,000 shares authorized, 4,501,301 issued and outstanding at December 31, 2022 and 2021		45		45
Additional paid-in capital		241,852		241,834
Accumulated other comprehensive loss		(6,158)		(6,077)
Accumulated deficit		(233,647)		(233,762)
Total stockholders' equity		2,092		2,040
Total liabilities and stockholders' equity	\$	5,077	\$	\$4,666

Consolidated Statements of Comprehensive Income (Loss) (in thousands)

	Years Ended	December 31,
	2022	2021
Revenues	\$ 9,744	\$ 6,371
Cost of revenues	6,600	4,394
Gross profit	3,144	1,977
Operating expenses:		
Research and development	776	791
Selling, general and administrative	2,175	2,264
Total operating expenses	2,951	3,055
Operating income/(loss)	193	(1,078)
Other income/(loss), net	(60)	771
Income/(loss) before income tax	133	(307)
Provision for income taxes	(18)	(82)
Net income/(loss)	115	(389)
Foreign currency translation adjustments	(81)	(60)
Comprehensive income/(loss)	\$ 34	\$ (449)

Consolidated Statements of Stockholders' Equity (in thousands)

	Commo	on S	tock	Additional		Accumulated Other			Total
	Shares		Amount	Paid-In Capital		Comprehensive Loss	4	Accumulated Deficit	Stockholders' Equity
Balance at December 31, 2020	4,101	\$	41	\$ 241,578	9	(6,017)	\$	(233,373)	\$ 2,229
Net loss	_		_	_		_		(389)	(389)
Foreign currency translation adjustment	_			_		(60)		_	(60)
Proceeds from sale of common stock	400		4	236		_		_	240
Stock-based compensation	_			20		_		_	20
Balance at December 31, 2021	4,501		45	241,834		(6,077)		(233,762)	2,040
Net income	_		_	_		_		115	115
Foreign currency translation adjustment	_		_	_		(81)		_	(81)
Stock-based compensation			_	18		_		_	 18
Balance at December 31, 2022	4,501	\$	45	\$ 241,852	\$	(6,158)	\$	(233,647)	\$ 2,092

Consolidated Statements of Cash Flows (in thousands)

	Years Ended December 31,			mber 31,
		2022		2021
Cash flows from operating activities:				
Net income/(loss)	\$	115	\$	(389)
Adjustments to reconcile net income (loss) to cash used in operating activities:				
Depreciation and amortization		196		205
Stock-based compensation expense		18		20
PPP loan forgiveness		_		(444)
Changes in operating assets and liabilities:				
Accounts receivable		(123)		(474)
Inventories		(131)		(62)
Prepaid expenses and other assets		299		(275)
Accounts payable, accrued expenses and other current liabilities		(398)		542
Net cash used in operating activities		(24)		(877)
Cash flows from investing activities:				
Purchases of property and equipment		(51)		(110)
Net cash used in investing activities		(51)		(110)
Cash flows from financing activities:				
Proceeds from sale of common stock		_		240
Proceeds from PPP loan				444
Net cash provided by financing activities				684
Effect of exchange rates on cash		(81)		(60)
Net change in cash		(156)		(363)
Cash at beginning of year		1,460		1,823
Cash at end of year	\$	1,304	\$	1,460
Non-cash financing activities				

Initial recognition of right-of-use assets

\$ 834 \$ —
Forgiveness of PPP loan

\$ — \$ 444

Notes to Consolidated Financial Statements

1. Description of Business

CDTi Advanced Materials, Inc. ("CDTi" or the "Company") is a leading provider of advanced technology for the emission catalyst, industrial catalyst and electrocatalyst markets. The Company possesses market leading expertise in catalyst design, engineering and coating for on and off-road as well as energy storage applications.

The Company has a proven ability to develop proprietary technology and materials incorporating various base metals that can enhance catalytic performance and reduce the use of costly platinum group metals ("PGMs") in catalyst coatings. The Company delivers its technology to customers through catalyst coatings as well as catalytic material supply and licensing arrangements. Customers include on and off-road emission catalyst manufacturers and distributors, as well as energy production, equipment, and servicing companies.

The Company's business is driven by several factors including increasingly stringent global emission standards for internal combustion engines, demand for novel catalyst formulations that can reduce or eliminate PGMs, accelerating development of battery and fuel cell technology and global investment in hydrogen production technologies.

It has operations in the United States ("U.S."), the United Kingdom and Sweden.

2. Significant Accounting Policies

Principles of Consolidation

The consolidated financial statements include the financial statements of the Company and its wholly owned subsidiaries. All intercompany transactions, including intercompany profits and losses and intercompany balances, have been eliminated in consolidation.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the U.S requires management of the Company to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent liabilities. These estimates and assumptions are based on management's best estimates and judgment. On an ongoing basis, the Company evaluates its estimates and assumptions, including those related to long-lived assets, stock-based compensation, allowance for doubtful accounts, inventory valuation, taxes and contingent and accrued liabilities. The Company bases its estimates on historical experience and various other factors, including the current economic environment, which it believes to be reasonable under the circumstances. Estimates and assumptions are adjusted when facts and circumstances dictate. Actual results may differ from these estimates under different assumptions and conditions. Management believes that the estimates are reasonable.

Cash

Cash consists of cash balances on hand and on deposit at banks. Cash on deposit at banks at times may exceed the Federal Deposit Insurance Corporation (FDIC) limits. The Company believes no significant concentration of credit risk exists with respect to these cash balances.

Accounts Receivable

Accounts receivables are recorded at the invoiced amount and do not bear interest. The allowance for doubtful accounts is the Company's best estimate of the amount of probable credit losses in the Company's existing accounts receivable. The Company determines the allowance based on historical write-off experience and past due balances over 90 days that are reviewed individually for collectability. Account balances are charged off against the allowance after all means of collection have been exhausted and the potential for recovery is considered remote. The Company does not have any off-balance sheet credit exposure related to its customers.

Inventories

Inventories are stated at the lower of cost (FIFO method) or net realizable value. Finished goods inventory includes materials, labor and manufacturing overhead. The Company establishes provisions for inventory that is obsolete or when quantities on hand are in excess of estimated forecasted demand. The creation of such provisions results in a write-down of inventory to net realizable value and a charge to cost of sales.

The Company's inventory includes precious metals (platinum, palladium and rhodium) for use in the manufacturing of catalysts. The precious metals are valued at the lower of cost or market (net realizable value), consistent with the Company's other inventory.

Property and Equipment

Property and equipment is capitalized at cost and is stated at cost less accumulated depreciation and amortization. Depreciation and amortization is determined using the straight line method over the estimated useful lives of the various asset classes. Machinery and equipment are depreciated over 2 to 10 years; furniture and fixtures, computer hardware and software and vehicles are depreciated over 2 to 5 years. Leasehold improvements are amortized over the shorter of estimated useful lives or the lease term. Repairs and maintenance are charged to expense as incurred and major replacements or betterments are capitalized.

Intangible Assets

The Company's intangible assets consist of trade names and acquired patents and technology and have finite lives. Intangible assets are carried at cost, less accumulated amortization. Amortization is computed on a straight-line or accelerated basis over the estimated useful lives of the respective assets, ranging from 5 to 20 years.

Long Lived Assets

Assets such as property and equipment and amortizable intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. An impairment loss is recognized when the sum of the expected undiscounted future net cash flows of an asset or asset group is less than its carrying amount and is measured as the amount by which the carrying amount of the asset or asset group exceeds its fair value.

Income Taxes

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax basis and operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. A valuation allowance against deferred tax assets is required if, based on the weight of available evidence, it is more likely than not that some portion or all of the deferred tax assets will not be realized. The valuation allowance should be sufficient to reduce the deferred tax assets to the amount that is more likely than not to be realized.

The Company recognizes the effect of income tax positions only if those positions are more likely than not of being sustained. Changes in recognition or measurement are reflected in the period in which the change occurs. The Company records interest and penalties related to unrecognized tax benefit in income tax expense.

Revenue Recognition

Net sales include products and shipping and handling charges, net of estimates for product returns as well as royalties earned under licensing agreements. Revenue for products and shipping and handling charges are measured as the amount of consideration the Company expects to receive in exchange for transferring products. All revenue is recognized when the Company satisfies its performance obligations under the contract. The Company recognizes revenue by transferring the promised products to the customer, with revenue recognized at the point in time the customer obtains control of the products.

The Company recognizes revenue for shipping and handling charges at the time the products are delivered to or picked up by the customer. The Company estimates product returns based on historical return rates. The majority of the Company's contracts have a single performance obligation and are short term in nature. The Company recognizes revenue for its usage-based royalties when the usage has occurred.

Revenue for the twelve months ended December 31, 2022 and 2021 were \$9.7 million and \$6.4 million, respectively. There were \$0 in contract assets recorded as accounts receivable and \$0 in contract liabilities recorded as deferred revenue as of December 31, 2022.

Sales taxes and value added taxes in foreign jurisdictions that are collected from customers and remitted to governmental authorities are accounted for on a net basis and therefore excluded from the transaction price and net sales.

Research and Development

Research and development costs are generally expensed as incurred. These expenses include compensation expense for employees and contractors engaged in research, design and development activities, as well costs paid to outside parties for testing, validation and certification of our products. Also included is any depreciation related to assets utilized in the development of new products.

Stock-Based Compensation

Equity awards consist of stock options. The Company measures the compensation cost for all stock-based awards at fair value on the date of grant and recognizes it on a straight-line basis over the service period for awards expected to vest, which is generally three years.

The Company measures the fair value of stock options using the Black-Scholes option-pricing model and certain assumptions, including the expected life of the stock options, an expected forfeiture rate and the expected volatility of its common stock.

Product Warranty

The Company provides for the estimated cost of product warranties in cost of sales, at the time product revenue is recognized. Warranty costs are estimated primarily using historical warranty information in conjunction with current engineering assessments applied to the Company's expected repair or replacement costs.

Foreign Currency

The functional currency of our subsidiary Engine Control Systems Europe AB in Sweden is the Swedish krona and the Clean Diesel Technologies Limited U.K. subsidiary, is the British pound sterling. Accordingly, the assets and liabilities of the foreign locations are translated into U.S. dollars at period-end exchange rates. Revenue and expense accounts are translated at the average exchange rates for the period. The resulting foreign currency exchange adjustments are charged or credited directly to other comprehensive income or loss as a separate component of stockholders' equity. Unrealized foreign currency exchange gains and losses on certain intercompany transactions that are of a long-term investment nature (i.e. settlement is not planned or anticipated in the foreseeable future) are also recorded in other comprehensive income or loss in stockholders' equity. Accumulated other comprehensive loss contained only foreign currency translation adjustments as of December 31, 2021 and 2022.

The Company has exposure to multiple currencies. The primary exposure is between the U.S. dollar, the Euro, British pound sterling and Swedish krona. Gains and losses arising from transactions denominated in currencies other than the functional currency of the entity are included in other income (expense) in the consolidated statements of comprehensive loss. Gains and losses arising from transactions denominated in foreign currencies are primarily related to inter-company loans that have been determined to be temporary in nature, cash, accounts receivable and accounts payable denominated in non-functional currencies.

Fair Value Measurements

Fair value is defined as an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset and liability. As a basis for considering such assumptions, a fair value hierarchy has been established that prioritizes the inputs used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (level 1 measurement) and the lowest priority to unobservable inputs (level 3 measurements). The three levels of the fair value hierarchy are as follows:

- Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities;
- Level 2: Inputs other than quoted prices included within Level 1 that are either directly or indirectly observable
 including quoted prices for similar instruments in active markets and quoted prices for identical or similar instruments
 in markets that are not active; and
- Level 3: Unobservable inputs in which little or no market activity exists, therefore requiring an entity to develop its own assumptions about the assumptions that market participants would use in pricing.

Fair Value of Financial Instruments

ASC Topic 825, "Financial Instruments", requires disclosure of the fair value of financial instruments for which the determination of fair value is practicable. The fair values of the Company's cash, trade accounts receivable, prepaid expenses and other current assets, accounts payable and accrued expenses and other current liabilities approximate carrying values due to the short maturity of these instruments.

3. Inventories

Inventories consist of the following (in thousands):

	Decemb	ber 31,	,
	2022		2021
Raw materials	\$ 493	\$	437
Finished goods	547		472
	\$ 1,040	\$	909

4. Property and Equipment

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

	 December 31,		
	2022		2021
Furniture and fixtures	\$ 461	\$	461
Computer hardware and software	42		42
Machinery and equipment	 2,643		2,592
	3,146		3,095
Less accumulated depreciation	 (2,942)		(2,889)
	\$ 204	\$	206

Depreciation expense was \$53,000 and \$43,000 for the years ended December 31, 2022 and 2021, respectively.

5. Intangible Assets

Intangible assets consist of the following (in thousands):

	Useful Life	December 31,			
	in Years		2022		2021
Trade name	15 - 20	\$	1,208	\$	1,208
Patents and know-how	5 - 12		1,266		1,266
			2,474		2,474
Less accumulated amortization			(2,213)		(2,070)
		\$	261	\$	404

The Company recorded amortization expense related to amortizable intangible assets of \$143,000 and \$162,000 for the years ended December 31, 2022 and 2021 respectively.

Estimated amortization expense for existing intangible assets for each of the next five years is as follows (in thousands):

rears chang December 31.	
2023	\$ 71
2024	71
2025	62
2026	29

6. Accrued Expenses and Other Current Liabilities

Vears ending December 31.

Accrued expenses and other current liabilities consist of the following (in thousands):

	December 31,		
	 2022	2021	
Accrued salaries and benefits	\$ 145 \$	131	
Accrued warranty (1)	18	18	
PGM liability	29	185	
Other	 658	749	
	\$ 850 \$	1,083	

⁽¹⁾ For additional information, refer to Note 7, "Accrued Warranty".

7. Accrued Warranty

The Company establishes reserves for future product warranty costs that are expected to be incurred pursuant to specific warranty provisions with its customers. The Company generally warrants its products against defects between one and five years from date of shipment, depending on the product. The warranty reserves are established at the time of sale and updated throughout the warranty period based upon numerous factors including historical warranty return rates and expenses over various warranty periods. Historically, warranty returns have not been material.

The following summarizes the activity in the Company's accrual for product warranty (in thousands):

	 Years End December	
	2022	2021
Balance at beginning of period	\$ 18 \$	33
Accrued warranty expense	_	_
Warranty claims paid/reduction in reserve	 _	(15)
Balance at end of period	\$ 18 \$	18

8. Warrants

From time to time, the Company issues warrants to purchase its common stock. Warrants have been issued for consulting services, in connection with the Company's issuance of debt and sales of its common stock.

Warrants activity is summarized as follows:

	Shares	Weighted Average Exercise Price	Range of Exercise Prices
Outstanding at December 31, 2020	141,530	\$ 20.71	\$11.00 - \$42.50
Issued	<u> </u>	_	_
Exercised	_	_	_
Expired	(141,530)	\$ 20.71	\$11.00 - \$42.50
Outstanding at December 31, 2021		_	_
Exercisable at December 31, 2021		_	_

9. Leases

Effective July 1, 2022, the Company entered into a non-cancellable operating lease for 20,735 square feet of industrial space in Oxnard, CA, which is currently used as the Company's headquarters. The lease term is four years, beginning August 1, 2022, and replaced the Company's month-to-month lease for the same property. There is no option to renew for an additional term. Initial base rent is \$20,735 per month, with 4% escalations annually at each anniversary date. In addition to base rent, the Company is also responsible for the payment of monthly operating expenses, initially estimated at \$2,350 per month.

Operating lease costs for the year ended December 31, 2022, was \$110,000. Short term lease costs for the year ended December 31, 2022 was \$167,000. Total lease costs for the year ended December 31, 2022, was \$277,000, of which \$184,000 was included in cost of goods sold, \$63,000 was included in research and development and \$30,000 was included in general and administrative expense. Short term lease costs for the year ended December 31, 2021 was \$247,000, of which \$161,000 was included in cost of goods sold, \$54,000 was included in research and development and \$32,000 was included in general and administrative expense.

The Company's weighted average remaining lease term as of December 31, 2022, was 3.5 years and the weighted average discount rate as of December 31, 2022, was 12.3%.

Cash paid for amounts included in the measurement of operating lease liabilities were \$104,000 for the year ended December 31, 2022.

Future minimum maturities of lease liabilities recognized on the condensed consolidated balance sheet as of December 31, 2022, are as follows (in thousands):

T. 1	T 7
Fiscal	Year
	I Cai

2023	\$ 253
2024	263
2025	274
2026	163
Total minimum lease payments	953
Less imputed interest	 (190)
Present value of lease payments	\$ 763

10. Stock-Based Compensation

The Clean Diesel Technologies, Inc. Stock Incentive Plan (formerly known as the Clean Diesel Technologies, Inc. 1994 Incentive Plan), as amended (the "Plan"), provides for the awarding of incentive stock options, non-qualified stock options, stock appreciation rights, restricted shares, performance awards, bonuses or other forms of share-based awards, or combinations of these to the Company's directors, officers, employees, consultants and advisors (except consultants or advisors in capital-raising transactions) as determined by the board of directors. At the Company's Annual Meeting of Shareholders held on May 23, 2012, the Company's shareholders approved certain amendments to the Plan, the most significant of which changed the Plan name, removed the evergreen provision and established a maximum number of 1.4 million shares to be reserved for issuance under the Plan, disallowed the repricing of outstanding stock options without shareholder approval, removed the ability to issue cash bonus awards under the Plan and modified the change in control provisions within the Plan.

Effective December 16, 2016, the Company adopted the Clean Diesel Technologies, Inc. 2016 Omnibus Incentive Plan (the "Omnibus Plan"), pursuant to the approval of the Omnibus Plan by the Company's stockholders by written consent dated October 24, 2016. The Omnibus plan was adopted by the Company's Board of Directors (the "Board") on October 11, 2016. Under the Omnibus Plan, the Company is authorized to grant equity-based awards in the form of stock options, restricted common stock, restricted stock units, stock appreciation rights, and other stock-based awards to employees (including executive officers), directors and consultants of the Company and its subsidiaries. The Omnibus Plan authorized the issuance of 2,250,000 shares of the Company's common stock.

Total stock-based compensation expense was approximately \$18,000 and \$20,000 for the years ended December 31, 2022 and 2021, respectively.

Stock Options

Stock option activity is summarized as follows:

	Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (thousands)
Outstanding at December 31, 2020	649,900	3.61	8.4	_
Granted	50,000	.40	_	
Exercised	_	_	_	_
Canceled				
Outstanding at December 31, 2021	699,900	\$ 3.38	7.6	_
Granted	60,000	0.30	<u> </u>	
Exercised	_	_	_	_
Canceled	_		_	_
Outstanding at December 31, 2022	759,900	\$ 3.14	6.8	
Vested and expected to vest at December 31, 2022	759,900	\$ 3.14	6.8	
Exercisable at December 31, 2022	706,400	\$ 3.29	6.9	_

The aggregate intrinsic value represents the difference between the exercise price and the Company's closing stock price on the last trading day of the year.

Stock options granted under the Plan typically expire ten years from the date of grant and are issued at a price equal to the fair market value of the underlying stock on the date of grant. The Company's board of directors may establish such vesting and other conditions with respect to options as it deems appropriate.

The Company estimates the fair value of stock options using a Black-Scholes option-pricing model. The weighted-average assumptions and grant date fair value for the options granted were as follows:

	2022	2021
Expected volatility	70.6%	61.3%
Risk-free interest rate	3.6%	1.2%
Dividend yield	_	
Expected life in years	5.0	5.0
Weighted average grant date fair value	\$ 0.18	\$ 0.21

The expected term of the options has historically been based upon the historical term until exercise or expiration of all granted options. Due to the significant change in the Company following the Merger and significant change in the terms of the options granted, CDTI's pre-Merger historical exercise data was not considered to provide a reasonable basis for estimating the expected term for current option grants. As such, the expected term of stock options granted in 2015 and later was determined using the "simplified method" as allowed under ASC 718-10-S99, "Compensation—Stock Compensation: Overall: SEC Materials." The "simplified method" calculates the expected term as the average of the vesting term and original contractual term of the options. The expected volatility is based on the volatility of the Company over the corresponding expected term of the option. The risk-free interest rate is the constant maturity rate published by the U.S. Federal Reserve Board that corresponds to the expected term of the option. The dividend yield is assumed as 0% because the Company has not paid dividends and does not expect to pay dividends in the future.

11. Income Taxes

Income (loss) from operations before income taxes include the following components (in thousands):

	 Year Ended December 31,		
	2022	2021	
U.Sbased operations	\$ (102) \$	(1,018)	
Non U.Sbased operations	235	711	
	\$ 133 \$	(307)	

Income tax expense (benefit) attributable to income from operations is summarized as follows (in thousands):

	Current		Deferred	Total
Year ended December 31, 2022:				
U.S. Federal	\$ _	\$	_	\$ _
State and local	17		_	17
Foreign	0		1	1
Total	\$ 17	\$	1	\$ 18
Year ended December 31, 2021:				
U.S. Federal	\$ _	\$	_	\$ _
State and local	7	-	_	7
Foreign	64		11	75
Total	\$ 71	\$	11	\$ 82

Income taxes attributable to income from operations differ from the amounts computed by applying the U.S. federal statutory rate of 21% to income from operations before income taxes as shown below (in thousands):

	 Year Ended December 31,		
	2022	2021	
Expected tax provision	\$ 28 \$	(66)	
Net tax effects of:			
Foreign tax rate differential	(6)	(12)	
State taxes, net of federal benefit	5	(112)	
Return to provision adjustment	94	91	
Permanent difference on convertible notes and warrants	_	(95)	
Other	105	139	
Change in deferred tax asset valuation allowance	(208)	137	
	\$ 18 \$	82	

Deferred tax assets and liabilities consist of the following (in thousands):

	D	December 31,		
	2022	2021		
Deferred tax assets:				
Research and development credits	\$ 2,	,486 \$ 2,486		
Operating loss carry forwards	7,	,430 7,776		
Interest		335 335		
Inventories		508 527		
Allowance for doubtful accounts		20 20		
Depreciation		86 95		
Capitalized research and development expenses		141 —		
Non-cash compensation	1,	,057 1,053		
Other		334 381		
Total gross deferred tax assets	12,	397 12,673		
Valuation allowance	(12,3	359) (12,602)		
Net deferred tax assets	\$	38 \$ 71		
Deferred tax liabilities:	_ _			
Other identifiable intangible assets		(33) (65)		
Total gross deferred tax liabilities		$(33) \qquad (65)$		
Net deferred tax assets	\$	5 \$ 6		

The Company had approximately \$26.3 million and \$23.2 million of federal and state income tax net operating loss carryforwards at December 31, 2022, respectively. The foreign net operating losses can be carried forward indefinitely. Future utilization of the federal and state net operating losses and credit carryforwards is subject to a substantial annual limitation due to ownership change limitations as required by Sections 382 and 383 of the Internal Revenue Code of 1986, as amended (the "Code"), as well as similar state limitations. The Company's net operating loss carryforwards are subject to Internal Revenue Services ("IRS") and other tax authorities' examination until they are fully utilized and such tax years are closed.

Of the \$26.3 million federal loss carryforwards approximately \$4.9 million of the loss will be subject to an annual limitation of \$0.2 million within the next 8 years. In addition, approximately \$6.9 million of the loss will be subject to an annual limitation of \$0.1 million within the next 8 years and \$0.3 million for the following 5 years. The federal net operating loss carryforwards incurred prior to tax years beginning in 2021 will expire at various dates through fiscal year 2040, all net operating losses arising in tax years beginning in 2021 are carried forward indefinitely, subject to annual limitations on their use pursuant to the Code. As a result of the "ownership change" the federal research and development credits have been limited and based on the limitation the Company does not anticipate being able to use any of these credits that existed as of the date of the Merger in future tax years.

Of the \$23.2 million of state net operating loss carryforwards approximately \$1.4 million of the loss will be subject to an annual limitation of \$0.1 million for the next 8 years. The state net operating loss carryforwards will expire at various dates through fiscal year 2041. The Company has state research and development credits of \$3.1 million. The Company has a full valuation allowance against the related deferred tax assets for its U.S. and U.K. entities as it is more likely than not that they will not be realized by the Company.

In assessing the potential realization of deferred tax assets, consideration is given to whether it is more likely than not that some portion or all of the deferred tax assets will be realized. The ultimate realization of deferred tax assets is dependent upon the Company attaining future taxable income during the periods in which those temporary differences become deductible. In

addition, the utilization of net operating loss carryforwards may be limited due to restrictions imposed under applicable federal and state tax laws due to a change in ownership. Based upon the level of historical operating losses and future projections, management believes it is more likely than not that the Company will not realize the deferred tax assets.

The Company has not recognized a deferred tax liability on undistributed earnings of its foreign subsidiaries, because these earnings are intended to be permanently reinvested. The amount of the unrecognized deferred tax liability depends on judgment required to analyze the withholding tax due, the applicable tax law and factual circumstances in effect at the time of any such distributions. Therefore, the Company believes it is not practicable at this time to reliably determine the amount of unrecognized deferred tax liability related to its undistributed earnings; however, these undistributed earnings are immaterial. If circumstances change and it becomes apparent that some or all of the undistributed earnings of a subsidiary will be remitted and income taxes have not been recognized by the parent entity, the parent entity shall accrue as an expense of the current period income taxes attributable to that remittance.

The following changes occurred in the amount of unrecognized tax benefits including related interest and penalties, included in the income taxes payable on the consolidated balance sheet (in thousands):

	 Year Ended December 31,		
	2022	2021	
Balance at beginning of year	\$ 868	\$ 818	
Additions for current year tax provisions	 30	50	
Balance at end of year	\$ 898	\$ 868	

If recognized, the entire amount of the unrecognized tax benefits would affect the effective tax rate. The Company had \$0.5 million accrued for payment of interest and penalties related to unrecognized tax benefits as of December 31, 2022 and 2021.

The Company operates in multiple tax jurisdictions, both within and outside of the United States. Although the timing of the resolution and/or closure of audits is not certain, the Company does not believe it is reasonably possible that its unrecognized tax benefits would materially change in the next twelve months. The following tax years remain open to examination by the major domestic taxing jurisdictions to which it is subject:

	Open Tax Years
United States—Federal	2018 – 2022
United States—State	2017 - 2022
Canada	2016 - 2022
Sweden	2019 - 2022
United Kingdom	2017 - 2022

12. Commitments and Contingencies

Litigation

The Company is involved in legal proceedings from time to time in the ordinary course of its business. Management does not believe that any of these claims and proceedings against it is likely to have, individually or in the aggregate, a material adverse effect on the Company's consolidated financial condition, results of operations or cash flows. Accordingly, the Company cannot determine the final amount, if any, of its liability beyond the amount accrued in the consolidated financial statements as of December 31, 2021 and 2022, nor is it possible to estimate what litigation-related costs will be in the future.

CSI Aliso, Inc.

CSI Aliso, Inc. ("CSIA"), a subsidiary of the Company that ceased operations in 2009, is appealing certain adverse findings of a sales and use tax audit (the "Audit") by the State of California relating to transactions that occurred from 2007 to 2009, which CSIA believes are without merit. Following a hearing before the California Office of Tax Appeals ("OTA") on September 20, 2022, the OTA issued a ruling upholding the findings of the Audit. CSIA has filed a petition for a rehearing and will continue to pursue available remedies to have the findings of the Audit overturned. The Audit identified a potential sales tax liability of \$0.7 million and a final assessment, if received, would also include interest estimated to be \$0.7 million.

13. Geographic Information

Net sales by geographic region based on location of sales organization is as follows (in thousands):

	 Year Ended December 31,		
	 2022	2021	
United States	\$ 7,106 \$	3,096	
Europe	 2,638	3,275	
Total international	2,638	3,275	
Total revenues	\$ 9,744 \$	6,371	

Property and equipment, net and total assets by geographic region is as follows (in thousands):

	Property and Equipment, net				
December 31, 2022					
United States	\$	204	\$	3,944	
Europe		_		1,134	
Total international				1,134	
Total	\$	204	\$	5,078	
	Property and Equipment, net		Total Asse		
December 31, 2021				_	
United States	\$	206	\$	3,298	
Europe		_		1,368	
Total international				1,368	
Total	\$	206	\$	4,666	

14. Concentrations

For the years ended December 31, 2022 and 2021, one customer represented 35% and 11%, respectively, of the Company's revenues. As of December 31, 2022, one customer accounts for approximately 44% of the accounts receivable balance. As of December 31, 2021, two customers account for approximately 25%, and 15% of the accounts receivable balance.

For the years ended December 31, 2022 and 2021, the Company had one supplier that accounted for approximately 31% and 40%, respectively, of the Company's material purchases. As of December 31, 2022, four vendors account for approximately

64% (26%, 16%, 12% and 11%) of the accounts payable balance. As of December 31, 2021, two vendors accounted for approximately 29% and 10% of the accounts payable balance.

15. Other Significant Events

The pandemic that was declared in March 2020 following the outbreak of COVID 19 had a significant impact on the Company's business. The long-lasting economic effects of this pandemic are still unknown.

The Company obtained loans under the Paycheck Payroll Program (PPP) under the Coronavirus Aid, Relief, and Economic Security (CARES) Act in the amount of \$444,000 during 2021. The proceeds of the loans were used to pay eligible expenses and were therefore forgiven. The Company recorded \$444,000 as other income in 2021.

16. Subsequent Events

The Company has evaluated subsequent events and transactions for potential recognition or disclosure in the financial statements through April 28, 2023, the date the financial statements were available to be issued.