

2021 ANNUAL REPORT

CORPORATE PROFILE

Psychemedics is the pioneer and global leader of testing for drugs of abuse using hair analysis. With over 30 years of continuous innovation, Psychemedics is the only company to develop and patent a process that releases virtually 100% of ingested drugs from the inside of the hair. We believe Psychemedics' superior science delivers the most sensitive FDA 510 K cleared tests in the world resulting in unmatched detection rates.

Psychemedics' results, science, and people are trusted by the world's most safety sensitive industries, the largest law enforcement agencies as well as by schools and elite institutions around the globe. The most recognized companies in the Fortune 500 rely on Psychemedics to ensure they are building drug free, safe, and productive workforces. We make businesses, our nation's highways, and campuses safe.

Psychemedics quite literally invented the science that re-invented an industry. We are the standard against which all others measure themselves for sensitivity, quality, and innovation to stay ahead of the ever-changing illicit drug landscape.



Dear Fellow Shareholders,

2021 was another extraordinary year. As a recovery year, it was slower than anticipated and very choppy. With COVID-19 continuing, we experienced a see-saw year with the Delta and Omicron variants. In addition, we saw the supply chain disruptions having a negative impact on some of our clients. Nonetheless, total revenues increased 17%; more significantly, our domestic revenues increased 21% compared to the full year 2020. The driving force in this improved revenue performance was the continued growth in key market segments including Oil & Gas, Transportation and Manufacturing; with other market segments, such as Schools, also showing some recovery. International revenues, primarily Brazil, decreased 29%, but on a much smaller base. Brazil volumes continue to be unpredictable, and our focus remains on our domestic business, as we have mentioned previously throughout the year.

There were a number of unusual items that flowed through our income statement in 2021. On the plus side, we had the forgiveness of our Paycheck Protection Program ("PPP") Loan of \$2.2 million and \$2.6 million in refundable employee retention credits ("ERC") for 2021. At the same time, we had two legal settlements which had a negative impact --- one a contract dispute for \$2.1 million paid by the Company and our insurers and the other a wage/break dispute for \$1.2 million. The PPP Loan gain on forgiveness and legal settlement costs were recorded in Other Income/Expense. The ERC reduced our cost of revenues and also our operating expenses. In addition, we did have a substantial increase in legal expenses due to two items: 1) costs incurred with the legal settlements and 2) ongoing activities regarding potential strategic transactions. At the same time, helping to offset, we continued our major focus on cost reduction (including continued salary reductions for management and high-level teammates, as well as cost cutting initiatives). Net-net, 2021 was certainly a year of improvement on an ongoing operating basis.

Despite the continuing challenges of COVID-19, 2021 was also another year of solid accomplishment by our team:

- Lab operations continued without interruption in the continuous COVID-19 environment.
- Successfully passed major lab certification audits.
- Continued to demonstrate our scientific leadership with two peer-reviewed papers published in major scientific journals.
- Significant strides continued to be made with our R&D projects.
- Successfully resolved two key litigation cases.
- Received PPP Loan forgiveness.
- Implemented new ERC process having a significant positive impact to cash flow.
- Paid a cash dividend in December 2021 to shareholders, the first since our hiatus starting in 2020.

As we are having our Annual Shareholder Meeting in August versus May, we already have reported the results of our first quarter of 2022. The first quarter did get off to a solid start with domestic revenues increasing 17%. The main drivers of this improved revenue performance again were continued growth in key market segments, Oil & Gas, Transportation and Manufacturing. Our focus remains on our domestic business. However, during the first five months of this year, we have seen inflation increase rapidly over that period and the labor shortage continuing to remain extremely tight. These are two major headwinds that we must continue to deal with.



Nonetheless, while the outlook still remains uncertain regarding COVID-19 and the nation's recovery, we believe our domestic business performance coming out of the quarter positions us well to keep our momentum for continued growth throughout the remainder of the year. Underlying our confidence going forward for 2022 and beyond are changing market dynamics which increasingly favor Psychemedics hair testing over urine. In view of the changing state legislative landscape and user drug trends, companies in non-safety sensitive market segments are increasingly looking at dropping the test for marijuana. This significantly diminishes the viability of urine testing, since marijuana is the predominant drug identified by the urine test. The most dangerous drugs that are rapidly increasing in usage, such as opioids, including fentanyl, cocaine, amphetamines, and benzodiazepines, most often go undetected in a urine test, and as a result, the total effectiveness of the urine test is now even more limited. The Psychemedics hair test not only detects more marijuana than the urine test, but it also detects significantly more of the most dangerous drugs. This is all happening at the same time that drug overdose deaths are setting new records with opioids, specifically fentanyl, accounting for almost two thirds of these deaths. This means that drug testing is even more important today for all employers.

Given this outlook, we also believe our extensive pre- COVID-19 track record of profitability (profitable from 1993 through 2019; dividend payments made for 94 consecutive quarters) and maintaining strength of our operations during COVID-19, clearly demonstrate that we know how to manage for profitable growth.

Looking at the most recently reported Balance Sheet, the Company had approximately \$2.1 million of cash (\$5.2 million of working capital) as of March 31, 2022. The total equipment financing outstanding was \$1.1 million as of March 31, 2022, compared to a total amount borrowed of \$12.2 million reflecting repayments of \$11.1 million since May 2014.

Based on the strengthening fundamentals and revenue growth, the Board made the decision to initiate an increase in return to shareholders in the form of an increased cash dividend of \$0.07 per share of outstanding common stock declared in May 2022. Our Board of Directors shares our confidence in the future of Psychemedics and remains committed to rewarding shareholders and sharing the financial success of the Company with them as we grow. We will continue to evaluate the dividend as we move forward.

I would like to take this opportunity to express my sincere appreciation to all of our clients for the contribution they are making to deter the use of drugs of abuse and the abuse of prescription drugs, to our directors for their counsel and guidance, and to all my teammates at Psychemedics for their commitment and dedication to excellence in serving our clients. And I want to thank you, our shareholders, for your continued support.

Sincerely,

Raymond C. Kubacki Chairman, President & CEO

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

	FORM 10-K								
	O SECTION 13 OR 15(d) OF T	THE SECURITIES EXCHANGE ACT OF 1934							
For the Fiscal Year Ended December 31, 2021									
☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934									
	Commission File Number:	1-13738							
	IEMEDICS COR								
Delaware		58-1701987							
(State or Other Jurisdiction of Incorporation	n or Organization)	(I.R.S. Employer Identification No.)							
289 Great Road Acton, Massachusetts (Address of Principal Executive Control of the Control of th	Offices)	01720 (Zip Code)							
•	Selephone Number Including Are								
_	ies registered pursuant to Section								
<u>Title of Class</u> Common stock. \$0.005 par value	Trading Symbol(s) PMD	Name of each exchange on which registered The Nasdaq Stock Market, LLC							
Securities	registered pursuant to Section 12	2(g) of the Act: None							
	-	(as defined in Rule 405 of the Securities Exchange Act of							
Indicate by a check mark if the registrant Exchange Act of 1934). Yes \square No \boxtimes	is not required to file reports 1	oursuant to Section 13 or Section 15(d) of the Securities							
	months (or for such shorter period	uired to be filed by Section 13 or $15(d)$ of the Securities of that the registrant was required to file such reports), and \Box							
		every Interactive Data File required to be submitted and (or for such shorter period that the registrant was required							
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Large Accelerated Filer □	Accelerated Filer □	Non-Accelerated Filer ⊠							
Smaller Reporting Company ⊠	Emerging Growth Company								
If an emerging growth company, indicate complying with any new or revised financial ac	•	has elected not to use the extended transition period for suant to Section 13(a) of the Exchange Act. \Box							
Indicate by a check mark whether the regist 1934). Yes \square No \boxtimes	strant is a shell company (as def	ined in Rule 12b-2 of the Securities and Exchange Act of							
Common Stock of the Registrant held by non-af	filiates (assuming for these purpo	Registrant outstanding. The aggregate market value of the ses, but not conceding, that all executive officers, directors as \$29 million, computed based upon the closing price of							

As of March 24, 2022, there were 5,590,656 shares of Common Stock of the Registrant outstanding.

\$6.96 per share on June 30, 2021.



SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

Some of the statements under "Business," "Risk Factors," "Legal Proceedings," "Market for Registrant's Common Stock and Related Stockholder Matters" and "Management Discussion and Analysis of Financial Condition and Results of Operations" and elsewhere in this Annual Report on Form 10-K (this "Form 10-K") constitute forward-looking statements under Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, including statements made with respect to future earnings, earnings per share, revenues, operating income, cash flows, competitive and strategic initiatives, potential stock repurchases, liquidity needs, dividends, future business, growth opportunities, profitability, pricing, new accounts, customer base, market share, test volume, sales volume, sales and marketing strategies, U.S. and foreign drug testing laws and regulations and the enforcement of such laws and regulations, required investments in plant, equipment and people, new test development, and contingencies, including litigation results. These statements involve known and unknown risks, uncertainties and other factors that may cause results, levels of activity, growth, performance, earnings per share or achievements to be materially different from any future results, levels of activity, growth, performance, earnings per share or achievements expressed or implied by such forward-looking statements.

The forward-looking statements included in this Form 10-K and referred to elsewhere are related to future events or our strategies or future financial performance. In some cases, you can identify forward-looking statements by terminology such as "may," "should," "believe," "anticipate," "future," "potential," "estimate," "encourage," "opportunity," "growth," "leader," "could", "expect," "intend," "plan," "expand," "focus," "through," "strategy," "provide," "offer," "allow," "commitment," "implement," "result," "increase," "establish," "perform," "make," "continue," "can," "ongoing," "include" or the negative of such terms or comparable terminology. All forward-looking statements included in this Form 10-K are based on information available to us as of the filing date of this report, and the Company assumes no obligation to update any such forward-looking statements. Our actual results could differ materially from the forward-looking statements.

Factors that may cause such differences include but are not limited to: (1) intense competition in the drug testing industry, particularly among companies that test utilizing hair samples; (2) risks associated with the development of markets for new products and services offered; (3) pricing policies; (4) risks associated with capacity expansion; (5) risks associated with U.S. government regulations, including, but not limited to, Food and Drug Administration (the "FDA") regulations, (6) risks associated with our international operations, including, but not limited to, proposed laws and regulations, market development and currency risks; (7) Psychemedics' ability to maintain its reputation and brand image; (8) the ability of Psychemedics to achieve its business plans, productivity improvements, cost controls, leveraging of its global operating platform, and acceleration of the rate of innovation; (9) the direct and indirect impact of coronavirus ("COVID-19") pandemic on our business and operations; (10) information technology system failures and data security breaches; (11) the uncertain global economy; (12) our ability to attract, develop and retain executives and other qualified employees and independent contractors, including distributors; (13) Psychemedics' ability to obtain and protect intellectual property rights; (14) litigation risks; and (15) changes in economic conditions which affect demand for our products and services.

Additional important factors that could cause actual results to differ materially from expectations reflected in our forward-looking statements include those described in Item 1A, "Risk Factors."

PSYCHEMEDICS CORPORATION

FORM 10-K ANNUAL REPORT For the Year Ended December 31, 2021 TABLE OF CONTENTS

	PARTI	Page
Item 1.	Business	1
Item 1A.	Risk Factors	6
Item 1B.	Unresolved Staff Comments	10
Item 2.	Properties	10
Item 3.	Legal Proceedings	10
Item 4.	Mine Safety Disclosures	10
	PART II	
Item 5.	Iarket for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	11
Item 6.	Selected Financial Data	
Item 7.	Management's Discussion and Analysis of Financial Condition and Results of Operations	
Item 7A.	Quantitative and Qualitative Disclosures About Market Risk	
Item 8.	Financial Statements and Supplementary Data	
Item 9.	Changes in and Disagreements With Accountants on Accounting and Financial Disclosure	39
Item 9A.	Controls and Procedures	39
Item 9B.	Other Information	40
Item 9C.	Disclosure Regarding Foreign Jurisdictions that Prevent Inspections	40
	PART III	
Item 10.	Directors, Executive Officers and Corporate Governance	41
Item 11.	Executive Compensation	44
Item 12.	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	52
Item 13.	Certain Relationships and Related Transactions, and Director Independence	53
Item 14.	Principal Accountant Fees and Services	53
	PART IV	
Item 15.	Exhibits and Financial Statement Schedules	54
Item 16.	Form 10-K Summary	54
	Signatures	55

Available Information

Psychemedics Corporation (together with its wholly-owned subsidiaries, the "Company" or "Psychemedics") maintains its principal executive office at 289 Great Road, Acton, MA 01720. Our telephone number is (978) 206-8220 and internet address is www.psychemedics.com. Our stock is traded on the NASDAQ Stock Market under the symbol "PMD". The Company makes available, free of charge, on the Investor Information section of its website, its Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and all amendments to those reports as soon as reasonably practicable after such material is electronically filed with the Securities and Exchange Commission (the "SEC"). Copies are also available, without charge, from Psychemedics Corporation, Attn: Investor Relations, 289 Great Road, Acton, MA 01720. Alternatively, reports filed with the SEC may be viewed or obtained at the SEC Public Reference Room in Washington, D.C., or the SEC's Internet site at www.sec.gov. We do not intend for information contained in our website to be part of this Annual Report on Form 10-K.

Item 1. Business

General

Psychemedics Corporation is a Delaware corporation organized on September 24, 1986. The consolidated financial statements of the Company include the accounts and results of operations of Psychemedics Corporation and its wholly-owned subsidiary Psychemedics International, LLC and their jointly-owned subsidiary Psychemedics Laboratórios Ltd. All significant inter-company balances and transactions have been eliminated in consolidation. All the Company's assets are located within the United States. The Company provides testing services for the detection of drugs of abuse through the analysis of hair samples. The Company's testing methods utilize a patented technology that digests the hair and releases drugs trapped in the hair without destroying the drugs. This is fundamental to the entire process because the patented method gets virtually 100% of the drug out of the hair, and if you cannot get the drug out of the hair, you cannot measure it. The Company then performs a proprietary custom-designed patented (US 10,539,580) enzyme immunoassay ("EIA") on the liquid supernatant, with confirmation testing by mass spectrometry.

The Company's primary application of its patented technology is as a testing service that analyzes hair samples for the presence of certain drugs of abuse. The Company's customized proprietary EIA procedures to drug test hair samples differ from the more commonly used immunoassay procedures employed by other hair testing companies. The Company's testing results provide quantitative information that can indicate the approximate amount of drug ingested as well as historical data, which can show a pattern of individual drug use over a longer period of time, thereby providing superior detection compared to other types of drug testing. This information is useful to employers for both applicant and employee testing, as well as treatment professionals, law enforcement agencies, school administrators, and parents concerned about their children's drug use. The Company provides screening and confirmation by mass spectrometry using industry-accepted practices for cocaine, marijuana, PCP, amphetamines (including ecstasy, eve and Adderall®), opiates (including heroin, hydrocodone, hydromorphone, oxycodone, oxymorphone and codeine), synthetic cannabinoids (including K2, Spice, Blaze), benzodiazepines (Xanax®, Valium®, and Ativan®), nicotine and Fentanyl. In addition, in 2013, the Company launched a hair test for alcohol which also looks back on use over a 90-day period, as our hair drug tests do.

Testing services are currently performed at the Company's Culver City, California campus located at 5832 Uplander Way and 5750 Hannum Avenue.

Background on Drug Testing with Hair

When certain chemical substances enter the bloodstream, the blood carries these substances to the hair where they become "entrapped" in the protein matrix in amounts approximately proportional to the amount ingested. The Company utilizes a patented drug extraction method followed by a unique patented EIA procedure to identify drugs in the hair. The patented drug extraction method effectively releases drugs from the hair without destroying the drugs, getting virtually 100% of the drug out of the hair. The patented method can be used with a broad range of immunoassay screen techniques and mass spectrometry methods.

The immunoassays used by the company have been patented under the name "Solid Phase Multi-Analyte Assay." The immunoassays produced by the Psychemedics R&D team were uniquely designed specifically to meet and even exceed the standards of radioimmunoassay ("RIAH"), the original testing method created and utilized by the Company prior to 2013. Because Psychemedics is the only hair testing laboratory that manufactures its own screening assays, it has full control over all aspects of its technology, and that powerful advantage facilitated the Company's creation of its EIA assays with equivalence to its own previously FDA-cleared radioimmunoassays.

The EIA screened positive results are then confirmed by mass spectrometry. Depending upon the length of hair, the Company is able to provide historical information on drug use by the person from whom the sample was obtained. Because head hair grows approximately 1.3 centimeters per month, a 3.9-centimeter head hair sample can reflect drug ingestion over the approximate three months prior to the collection of the sample. Another option is sectional analysis of the head hair sample, in which the hair is sectioned into lengths which approximately correspond to certain time periods, thereby providing information on patterns of drug use.

1

Validation of the Company's Proprietary Testing Methods

The process of analyzing human hair for the presence of drugs has been the subject of numerous peer-reviewed, scientific field studies. Many of the studies have been funded by the National Institute of Justice or the National Institute on Drug Abuse ("NIDA"). Several hundred research articles written by independent researchers have been published supporting the general validity and usefulness of hair analysis.

Some of the Company's customers have also completed their own testing to validate the Company's hair test results compared to other companies' urine test results. These studies consistently confirmed the Company's superior detection rate compared to urinalysis testing. When results from the Company's hair testing methods were compared to urine results in side-by-side evaluations, 5 to 10 times as many drug abusers were accurately identified by the Company's proprietary methods.

In 1998, the National Institute of Justice, utilizing Psychemedics' previously utilized RIAH hair testing assay, completed a Pennsylvania Prison study where hair analysis revealed an average prison drug use level of approximately 7.9% in 1996. Comparatively, urinalysis revealed virtually no positives. After measures to curtail drug use were instituted (drug-sniffing dogs, searches and scanners), the use level fell to approximately 2% according to the results of hair analysis in 1998. Again, the urine tests showed virtually no positives. The study illustrates the usefulness of hair analysis to monitor populations and the weakness of urinalysis.

The Company has received 510k clearance from the FDA on nine EIA assays used to test head and body hair for drugs of abuse.

The Company's decontamination wash protocol and the effects in eliminating surface contamination were analyzed in a study conducted by scientists at the Laboratory of the Federal Bureau of Investigation (the "FBI") and published in August 2014 in the Journal of Analytical Toxicology. The FBI concluded that the use of an extended wash protocol of the type used by the Company will exclude false positive results from environmental contact with cocaine. In the study, the FBI cited Psychemedics' studies published in 1993, 2002, 2004, and 2005, and named our Vice President of Laboratory Operations, and our lab, in its acknowledgments. The FBI study also supported the use of metabolites known as hydroxycocaines as evidence of ingestion. These metabolites were first identified in hair by Psychemedics.

Advantages of Using the Company's Patented Method

The Company asserts that hair testing using its patented method confers substantive advantages over detection through urinalysis. Although urinalysis testing can provide accurate drug use information, the scope of the information is short-term and is generally limited to the type of drug ingested within a few days of the test. Studies published in many scientific publications have indicated that most drugs disappear from urine within a few days.

In contrast to urinalysis testing, hair testing using the Company's patented method can provide long-term historical drug use information resulting in a significantly wider window of detection. This window may be several months or longer depending on the length of the hair sample. The Company's standard test offering, however, uses a 3.9-centimeter length head hair sample cut close to the scalp, which measures use for approximately three months prior to collection of the sample.

This wider window enhances the detection efficiency of hair analysis, making it particularly useful in pre-employment and random testing. Hair testing not only identifies more drug users, but it may also uncover patterns and severity of drug use (information most helpful in determining the scope of an individual's involvement with drugs), while serving as a deterrent against drug use. Hair testing employing the Company's patented method greatly reduces the incidence of "false negatives" associated with evasive measures typically encountered with urinalysis testing. For example, urinalysis test results are adversely impacted by excessive fluid intake prior to testing and by adulteration or substitution of the urine sample. Moreover, a drug user who abstains from use for a few days prior to urinalysis testing can usually escape detection. Hair testing is effectively free of these problems, as it cannot be thwarted by evasive measures typically encountered with urinalysis testing. Hair testing is also attractive to customers since sample collection is typically performed under close supervision yet is less intrusive and less embarrassing for test subjects.

Hair testing using the Company's patented method (with mass spectrometry confirmation) further reduces the prospects of error in conducting drug detection tests. Urinalysis testing is more susceptible to problems such as "evidentiary false positives" resulting from passive drug exposure or poppy seeds. To combat this problem, in federally mandated testing, the opiate cutoff levels for urine testing were raised 667% (from 300 to 2,000 ng/ml) on December 1, 1998, and testing for the presence of a heroin metabolite, 6-MAM, was required. These requirements, however, effectively reduced the detection time frame for confirmed heroin use, such that 6-MAM in urine can typically only be detected for several hours post drug use. In contrast, the metabolite 6-MAM is stable in hair and can be detected for months.

In the event a positive urinalysis test result is challenged, a test on a newly collected urine sample is not a viable remedy. Unless the forewarned individual continues to use drugs prior to the date of the newly collected sample, a re-test may yield a negative result when using urinalysis testing because of temporary abstinence. In contrast, when the Company's hair testing method is offered on a repeat hair sample, the individual suspected of drug use cannot as easily affect the results because historical drug use data remains locked in the hair fiber.

When compared to other hair testing methods, not only are the Company's assays cleared by the FDA for head and body hair, the assays also employ a unique patented method of digesting hair that the Company believes allows for the most efficient release of drugs from the hair without destroying the drugs. The Company's method of releasing drugs from hair is a key advantage and results in superior detection rates.

Disadvantages of Hair Testing

There are some disadvantages of hair testing as compared to drug detection through urinalysis. Because hair starts growing below the skin surface, drug ingestion evidence does not appear in hair above the scalp until approximately five to seven days after use. Thus, hair testing is not suitable for determining drug presence in "for cause" testing as is done in connection with an accident investigation. It does, however, provide a drug history which can complement urinalysis information in "for cause" testing.

The Company's prices for its tests are generally somewhat higher than prices for tests using urinalysis, but the Company believes that its superior detection rates provide more value to the customer. This higher pricing policy could, however, adversely impact the growth of the Company's sales volume and failure to obtain new business.

Hair Alcohol Testing

In 2013, the Company launched a test for alcohol using hair. This test measures average alcohol consumption over a period of approximately three months, indicates the approximate level of alcohol use during that time period, and can provide a behavioral indication of excessive use. The test measures the amount of ethyl glucuronide (EtG) in the hair – a trace metabolite of ethanol and a direct alcohol biomarker.

Intellectual Property

Certain aspects of the hair analysis method currently used by the Company are covered by US and foreign patents owned by the Company. The Company has been granted a total of twelve US patents, including a patent issued to the Company in 2011 that focuses on digesting hair and releasing drugs trapped in the hair without destroying the drugs. This patent can be used with a broad range of immunoassay screen techniques, mass spectrometry methods, and chromatographic procedures. In 2012, the Company received an additional US patent that extended the range of the patent received in 2011. More recently, two US patents related to integrity testing of hair samples issued in 2015 and 2016, and a US patent application directed to detection of multiple analytes was allowed. Additional patent applications are currently pending in the U.S. and internationally. In 2019, US Patent 10,539,580 was issued covering our Solid Phase Multi-Analyte Assay used in all our cleared EIA FDA submissions.

The Company also relies on trade secrets to protect certain aspects of its proprietary technology. The Company's ability to protect the confidentiality of its trade secrets is dependent upon the Company's internal safeguards and upon the laws protecting trade secrets and unfair competition.

In the event that patent protection or protection under the laws of trade secrets is not sufficient and the Company's competitors succeed in duplicating the Company's products, the Company's business could be materially adversely affected.

Target Markets

Workplace

The Company focuses its primary marketing efforts on the private sector, with particular emphasis on job applicant and employee testing.

Most businesses use drug testing to screen job applicants and employees. The Hazeldon Foundation survey from 2007 indicated that 85 percent of Human Resource ("HR") professionals believe that drug testing is an effective way to identify substance abuse. The prevalence of drug screening programs reflects a concern that drug use contributes to employee health problems and costs. As the same study found that 62 percent of HR professionals believe that absenteeism is the most significant problem caused by substance abuse and addiction, followed at 49 percent by reduced productivity, a lack of trustworthiness at 39 percent, a negative impact on the company's external image at 32 percent, missed deadlines at 31 percent, and in certain industries, safety hazards. It has been estimated that substance abuse costs to American businesses is more than \$100 billion annually.

The principal criticism of employee drug testing programs centers on the effectiveness of the testing program. Most private sector testing programs use urinalysis. Such programs are susceptible to evasive maneuvers and the inability to obtain confirmation through repeat samples in the event of a challenged result. An industry has developed over the Internet, and through direct mail, marketing a wide variety of adulterants, dilutants, clean urine and devices to assist drug users in falsifying urine test results.

Moreover, scheduled tests such as pre-employment testing and some random testing programs provide an opportunity for many drug users to simply abstain for a few days in order to escape detection by urinalysis.

The Company presents its patented hair analysis method to potential clients as a better technology well suited to employer needs. Field studies and actual client results support the accuracy and superior effectiveness of the Company's patented technology and its ability to detect varying levels of drug use.

The Company performs a confirmation test of all screened positive results through mass spectrometry. The use of mass spectrometry is an industry accepted practice used to confirm a positive test result from the screening process. The Company offers its clients an expanded drug screen with mass spectrometry confirmation of cocaine, PCP, marijuana, amphetamines, opiates, synthetic cannabinoids and benzodiazepines. In addition, the Company offers a hair test for alcohol which also looks back on use over a 90-day period, as our hair drug tests do.

Schools

The Company currently serves hundreds of schools throughout the United States and in several foreign countries. The Company offers its school clients the same five-drug screen with mass spectrometry confirmation that is used with the Company's workplace testing service.

Parents

The Company also offers a personal drug testing service, known as "PDT-90"®, for parents concerned about drug use by their children. It allows parents to collect a small sample of hair from their child in the privacy of the home, send it to the Company's laboratory and have it tested for drugs of abuse by the Company. The PDT-90 testing service uses the same patented method that is used with the Company's workplace testing service.

Research

The Company is involved in the following ongoing studies involving use of drugs of abuse in various populations: In 2017, the Company partnered with an NIH-funded study titled "Adolescent Brain Cognitive Development" ("ABCD") which expects to enroll 12,000 youths age 9-10 over a 2-2.5 year recruitment period. The objective of the ABCD consortium is to establish a national, multisite, longitudinal cohort and database by studying youth prospectively in order to examine brain and cognitive development in children and adolescents through a period (10 years) when significant development of intellectual and emotional functions occurs. Psychemedics' role in this study is to test hair to detect use of drugs over the time period. The Company is also partnering with Olin Neuropsychiatry Research Center Institute of Living Hartford Hospital in a research study entitled, "Neurochemical and Functional Correlates of Memory in Emerging Adult Marijuana Users." The study is aiming to better characterize the impact of heavy marijuana use on memory and is funded by a grant from NIDA.

Geographic Scope

Revenues outside the United States were 5%, 9% and 27% of consolidated revenues for years ended, 2021, 2020 and 2019, respectively.

Distribution

The Company markets its corporate drug testing services through its own sales force, distributors and webinars. The Company markets its home drug testing service, PDT-90®, through the Internet.

The business in Brazil is sold through its non-exclusive distributor. The agreement requires that the Psychemedics' hair drug tests be marketed, sold, and reported in Brazil under the Psychemedics Corporation brand name, with all related materials so identified, and with actual testing services of Psychemedics' tests to continue to be performed by Psychemedics at its laboratory in California. Either the Company or the distributor are able to cancel the distribution agreement upon 90-days' prior written notice.

In 2016, the Company was certified as a Center of Excellence by BenchmarkPortal for its customer service function. Customer service is a key component to the sales and support function and this certification validates the efforts by the Company to support our customers.

Significant Customers and Concentration of Credit Risk

The Company had no customers that represented 10% or more of total revenue for the years ended December 31, 2021, and 2020, respectively. The Company had one customer that represented 26% of total revenue for the year ended December 31, 2019. The Company had no customers account for 10% or more of the total accounts receivable balance as of December 31, 2021, and 2020, respectively.

The Company maintains its cash in bank accounts at high quality financial institutions. The individual balances, at times, may exceed federally insured limits. These deposits may be redeemed upon demand, and the Company believes that the financial institutions that hold the Company's cash are financially sound and, accordingly, minimal credit risk exists with respect to cash.

Competition

The Company competes directly with numerous commercial laboratories that test for drugs primarily through urinalysis testing. Most of these laboratories, such as Quest Diagnostics, have substantially greater financial resources, market identity, drug testing market share,

marketing organizations, facilities, and more personnel than the Company. The Company has been steadily increasing its base of corporate customers and believes that future success with new customers is dependent on the Company's ability to communicate the advantages of implementing a drug program utilizing the Company's patented hair analysis method.

The Company's ability to compete is also a function of pricing. The Company's prices for its tests are generally higher than prices for tests using urinalysis. However, the Company believes that its superior detection rates, coupled with the customer's ability to test less frequently due to hair testing's wider window of detection (three months versus approximately three days with urinalysis), provide more value to the customer. This pricing policy could, however, lead to slower sales growth for the Company.

The Company also competes with other hair testing laboratories. The Company distinguishes itself from hair testing competitors by emphasizing the superior results the Company obtains through use of its unique patented extraction method (getting drug out of the hair), in combination with the Company's FDA cleared immunoassay screen.

Government Regulation

The Company is licensed as a clinical laboratory by the State of California as well as certain other states. All tests are performed according to the laboratory standards established by the Department of Health and Human Services, through the Clinical Laboratories Improvement Amendments, and various state licensing statutes.

A substantial number of states regulate drug testing. The scope and nature of such regulations varies greatly from state to state and is subject to change from time to time. The Company addresses state law issues on an ongoing basis.

The Federal Food, Drug and Cosmetic Act, as amended requires companies engaged in the business of testing for drugs of abuse using a test (screening assay) not previously recognized by the FDA to submit their assay to the FDA for recognition prior to marketing. In addition, the laboratory performing the tests is required to be certified by a recognized agency. In 2002, the Company received 510k clearance to market all five of its assays utilizing RIAH technology.

In 2008, the Company received the first College of American Pathologists certification specifically including hair testing.

In 2011, the Company received ISO/IEC 17025 International Accreditation for a broad spectrum of laboratory testing including drugs of abuse and forensics in hair and urine specimens. ISO/IEC 17025 accreditation provides formal recognition to laboratories that demonstrate technical competency and maintains this recognition through periodic evaluations to ensure continued compliance.

In 2012, the Company received 510k clearance from the FDA to market five of its assays utilizing the Company's custom developed EIA technology.

In 2013, the Company received 510k clearance from the FDA to market two additional assays utilizing the Company's custom developed EIA technology.

In 2016, the Company received accreditation from the Standards Council of Canada as an accredited testing laboratory.

In 2017, the Company received 510k clearance from the FDA to market one additional assay utilizing the Company's custom developed EIA technology.

In 2019, the Company received 510k clearance from the FDA to market one additional assay utilizing the Company's custom developed EIA technology.

Research and Development

The Company is continuously engaged in research and development activities. During the years ended December 31, 2021, 2020 and 2019, \$1.1 million, \$1.3 million and \$1.6 million, respectively, were expended for research and development. The Company continues to perform research activities to develop new products and services and to improve existing products and services utilizing the Company's proprietary technology. The Company also continues to evaluate methodologies to enhance its drug screening capabilities. Additional research using the Company's proprietary technology is being conducted by outside research organizations through government-funded studies.

Employees

As of December 31, 2021, the Company employed 139 employees, 4 of whom were in R&D. None of the Company's employees are subject to a collective bargaining agreement and the Company believes that overall relations with employees are good.

Item 1A. Risk Factors

In addition to other information contained in this Form 10-K, the following risk factors should be carefully considered in evaluating Psychemedics Corporation and its business because such factors could have a significant impact on our business, operating results and financial condition. These risk factors could cause actual results to materially differ from those projected in any forward-looking statements.

The ongoing COVID-19 pandemic may continue to adversely affect our business, results of operation and financial condition.

National, state and local governments in affected regions have implemented and may continue to implement safety precautions, including but not limited to, quarantines, travel restrictions, shelter in place orders and shutdowns. These measures may disrupt normal business operations and may have significant impact on financial markets worldwide.

We continue to monitor our operations and applicable government restrictions, and we have made modifications to our normal operations because of the COVID-19 pandemic, including travel and working from home. We have also limited our in-person interactions by our customer-facing professionals. This could negatively impact our ability to market our products effectively.

The extent of the impact of COVID-19 on our operational and financial performance will depend on certain developments, including the duration and spread of the outbreak, impact on our customers, employees and vendors all of which are uncertain and cannot be predicted. A material disruption in our workplace as a result of COVID-19 could affect our ability to carry on our business operations in the ordinary course and may require additional cost and effort should employees not be able to physically on-premises.

Companies may develop products that compete with our products and some of these companies may be larger and better capitalized than we are.

Many of our competitors and potential competitors are larger and have greater financial resources than we do and offer a range of products broader than our products. Some of the companies with which we now compete or may compete in the future may develop more extensive research and marketing capabilities and greater technical and personnel resources than we do and may become better positioned to compete in an evolving industry. Inability to compete successfully could harm our business and prospects.

Increased competition, including price competition, could have a material impact on the Company's net revenues and profitability.

Our business is intensely competitive, both in terms of price and service. Pricing of drug testing services is a significant factor often considered by customers in selecting a drug testing laboratory. As a result of the clinical laboratory industry undergoing significant consolidation, larger clinical laboratory providers can increase cost efficiencies afforded by large-scale automated testing. This consolidation results in greater price competition. The Company may be unable to increase cost efficiencies sufficiently, if at all, and as a result, its net earnings and cash flows could be negatively impacted by such price competition. The Company may also face increased competition from companies that do not comply with existing laws or regulations or otherwise disregard compliance standards in the industry. Additional competition, including price competition, could have a material adverse impact on the Company's net revenues and profitability. The Company operations in Brazil are subject to price pressures with new competitors entering the market. The Company may also face changes in fee schedules, competitive bidding for laboratory services or other actions or pressures reducing payment schedules as a result of increased or additional competition.

Our results of operations are subject in part to variation in our customers' hiring practices and other factors beyond our control.

Our results of operations have been and may continue to be subject to variation in our customers' hiring practices and job creation, which in turn is dependent, to a large extent, on the general condition of the economy, especially within our major market segments. Results for a particular quarter may vary due to several factors, including but not limited to:

- economic conditions in our markets in general;
- economic conditions affecting our customers and their particular industries;
- the introduction of new products and product enhancements by us or our competitors; and
- pricing and other competitive conditions.

A failure to obtain and retain new customers, or a loss of existing customers, or a reduction in tests ordered, could impact the Company's ability to successfully grow its business.

The Company needs to obtain and retain new customers. In addition, a reduction in tests ordered, without offsetting growth in its customer base, could impact the Company's ability to successfully grow its business and could have a material adverse impact on the Company's net revenues and profitability. We compete primarily based on the quality of testing, timeliness of results, reputation in the industry, the pricing of services and ability to employ qualified personnel. The Company's failure to successfully compete on any of these factors could result in the loss of customers and a reduction in the Company's ability to expand its customer base.

Our business could be harmed if we are unable to protect our technology.

We rely primarily on a combination of trade secrets, patents and trademark laws and confidentiality procedures to protect our technology. Despite these precautions, unauthorized third parties may infringe or copy portions of our technology. In addition, because patent applications in the United States are not publicly disclosed until either: (1) 18 months after the application filing date or (2) the publication date of an issued patent wherein applicant(s) seek only US patent protection, applications not yet disclosed may have been filed which relate to our technology. Moreover, there is a risk that foreign intellectual property laws will not protect our intellectual property rights to the same extent as United States intellectual property laws. In the absence of the foregoing protections, we may be vulnerable to competitors who attempt to copy our products, processes or technology.

Our business could be affected by IT system failures or Cybersecurity breaches.

A computer or IT system failure could affect our ability to perform tests, report test results or properly bill customers for services performed. Failures could occur as a result of the standardization of our IT systems and other system conversions, telecommunications failures, malicious human acts (such as electronic break-ins or computer viruses) or natural disasters. Sustained system failures or interruption of the Company's systems in one or more of its operations could disrupt the Company's ability to process and provide test results in a timely manner and/or bill the appropriate party. Failure of the Company's information systems could adversely affect the Company's business, profitability and financial condition.

Our technologies, systems and networks may be subject to cybersecurity breaches. Although we have experienced occasional, actual or attempted breaches of our cybersecurity, none of these breaches has had a material effect on our business, operations or reputation. If our systems for protecting against cybersecurity risks prove to be insufficient, we could be adversely affected by having our business systems compromised, our proprietary information altered, lost or stolen, or our business operations disrupted. As cyber attacks continue to evolve, we may be required to expend significant additional resources to continue to modify or enhance our protective measures or to investigate and remediate any information systems and related infrastructure security vulnerabilities.

In addition, certain third parties to whom we outsource our services and functions, or with whom we interface, store our confidential patient data or other confidential information as also subject to the same IT risks. A breach or attack affecting these outsourced third parties could negatively impact our business.

Failure to maintain confidential information could result in a significant financial impact.

The Company maintains confidential information regarding the results of drug tests and other information including credit card and payment information from our customers. The failure to protect this information could result in lawsuits, fines or penalties. Any loss of data or breach of confidentiality, such as through a computer security breach, could expose the Company to a financial liability.

Adverse results in material litigation could have an adverse financial impact and an adverse impact on our client base and reputation.

We are or may in the future become subject to a variety of litigation and legal compliance risks relating to, among other things: corporate matters; commercial matters; financial and securities regulations; and employment and benefit matters. Unfavorable outcomes regarding these assessments could have a material adverse effect on our financial statements in any particular reporting period. Results of legal and regulatory proceedings cannot be predicted with certainty and for some matters, such as class actions, no insurance is cost-effectively available. Regardless of merit, legal and regulatory proceedings may be both time-consuming and disruptive to our operations and could divert the attention of our management and key personnel from our business operations. We estimate loss contingencies and establish accruals as required by generally accepted accounting principles, based on our assessment of contingencies where liability is deemed probable and reasonably estimable, in light of the facts and circumstances known to us at a particular point in time.

We are subject to, and could be further subject to, governmental investigations or actions by other third parties.

We are subject to various federal and state laws, including employment laws and regulations, violations of which can involve civil or criminal sanctions. Responding to governmental investigations or other actions may be both time-consuming and disruptive to our operations and could divert the attention of our management and key personnel from our business operations.

Our future success will depend on the continued services of our key personnel.

Our people are a critical resource. The loss of any of our key personnel could harm our business and prospects. We may not be able to attract and retain personnel necessary for the development of our business. We do not have key personnel under contract other than 4 officers who have agreements providing for severance and non-compete covenants in the event of termination of employment following a change of control. Further, we do not have any key man life insurance for any of our officers or other key personnel.

There is a risk that our insurance will not be sufficient to protect us from errors and omissions liability or other claims, or that in the future errors and omissions insurance will not be available to us at a reasonable cost, if at all.

Our business involves the risk of claims of errors and omissions and other claims inherent to our business. We maintain errors and omissions and general liability insurance subject to deductibles and exclusions. There is a risk that our insurance will not be sufficient to protect us from all such possible claims. An under-insured or uninsured claim could harm our operating results or financial condition.

Our research and development capabilities may not produce viable new services or products.

In order to remain competitive, we need to continually improve our products, develop new technologies to replace older technologies that have either become obsolete or for which patent protection is has expired. It is uncertain whether we will continually be able to develop services that are more efficient, effective or that are suitable for our customers. Our ability to create viable products or services depends on many factors, including the implementation of appropriate technologies, the development of effective new research tools, the complexity of the chemistry and biology, the lack of predictability in the scientific process and the performance and decision-making capabilities of our scientists. There is no guarantee that our research and development teams will be successful in developing improvements to our technology.

Improved testing technologies, or the Company's customers using new technologies to perform their own tests, could adversely affect the Company's business.

Advances in technology may lead to the development of more cost-effective technologies that can be operated by third parties or customers themselves in their own offices, without requiring the services of a freestanding laboratory. Development of such technology and its use by the Company's customers could reduce the demand for its testing services and negatively impact our revenues.

We may not be able to recruit and retain the experienced scientists and management we need to compete in our industry.

Our future success depends upon our ability to attract, retain and motivate highly skilled scientists and management. Our ability to achieve our business strategies depends on our ability to hire and retain high caliber scientists and other qualified experts. We compete with other testing companies, research companies and academic and research institutions to recruit personnel and face significant competition for qualified personnel. We may incur greater costs than anticipated, or may not be successful, in attracting new scientists or management or in retaining or motivating our existing personnel.

Our future success also depends on the personal efforts and abilities of the principal members of our senior management and scientific staff to provide strategic direction, to manage our operations and maintain a cohesive and stable environment.

Our facilities and practices may fail to comply with government regulations.

Our testing facilities and processes must be operated in conformity with current government regulations. These requirements include, among other things, quality control, quality assurance and the maintenance of records and documentation. If we fail to comply with these requirements, we may not be able to continue our services to certain customers, or we could be subject to fines and penalties, suspension of production, or withdrawal of our certifications. We operate a facility that we believe conforms to all applicable requirements. This facility and our testing practices are subject to periodic regulatory inspections to ensure compliance.

Our business could be harmed from the loss or suspension of any licenses.

The forensic laboratory testing industry is subject to significant regulation and many of these statutes and regulations are subject to change. The Company cannot assure that applicable statutes and regulations will not be interpreted or applied by a regulatory authority in a manner that would adversely affect its business. Potential sanctions for violation of these regulations could include the suspension or loss of various licenses, certificates and authorizations, which could have a material adverse effect on the Company's business. In addition, potential delays in renewals of licenses could also harm the Company.

If our use of chemical and hazardous materials violates applicable laws or regulations or causes personal injury we may be liable for damages.

Our drug testing activities, including the analysis and synthesis of chemicals, involve the controlled use of chemicals, including flammable, combustible, and toxic materials that are potentially hazardous. Our use, storage, handling and disposal of these materials is subject to federal, state and local laws and regulations, including the Resource Conservation and Recovery Act, the Occupational Safety and Health Act and local fire codes, and regulations promulgated by the Department of Transportation, the Drug Enforcement Agency, the Department of Energy, and the California Department of Public Health and Environment. We may incur significant costs to comply with these laws and regulations in the future. In addition, we cannot completely eliminate the risk of accidental contamination or injury from these materials, which could result in material unanticipated expenses, such as substantial fines or penalties, remediation costs or damages, or the loss of a permit or other authorization to operate or engage in our business. Those expenses could exceed our net worth and limit our ability to raise additional capital.

Our operations could be interrupted by damage to our laboratory facilities.

Our operations are dependent upon the continued use of our laboratories and equipment in Culver City, California. Catastrophic events, including earthquakes, fires or explosions, could damage our laboratories, equipment, scientific data, work in progress or inventories of chemicals and may materially interrupt our business. We employ safety precautions in our laboratory activities in order to reduce the likelihood of the occurrence of certain catastrophic events; however, we cannot eliminate the chance that such events will occur. Rebuilding our facilities could be time consuming and result in substantial delays in fulfilling our agreements with our customers. We maintain business interruption insurance to cover continuing expenses and lost revenue caused by such occurrences. However, this insurance does not compensate us for the loss of opportunity and potential harm to customer relations that our inability to meet our customers' needs in a timely manner could create.

Agreements we have with our employees, consultants and customers may not afford adequate protection for our trade secrets, confidential information and other proprietary information.

In addition to patent protection, we also rely on copyright and trademark protection, trade secrets, know-how, continuing technological innovation and licensing opportunities. In an effort to maintain the confidentiality and ownership of our trade secrets and proprietary information, we require our employees, consultants and advisors to execute confidentiality and proprietary information agreements. However, these agreements may not provide us with adequate protection against improper use or disclosure of confidential information and there may not be adequate remedies in the event of unauthorized use or disclosure. Furthermore, we may from time to time hire scientific personnel formerly employed by other companies involved in one or more areas similar to the activities we conduct. In some situations, our confidentiality and proprietary information agreements may conflict with, or be subject to, the rights of third parties with whom our employees, consultants or advisors have prior employment or consulting relationships. Although we require our employees and consultants to maintain the confidentiality of all proprietary information of their previous employers, these individuals, or we, may be subject to allegations of trade secret misappropriation or other similar claims as a result of their prior affiliations. Finally, others may independently develop substantially equivalent proprietary information and techniques or otherwise gain access to our trade secrets. Our failure or inability to protect our proprietary information and techniques may inhibit or limit our ability to compete effectively or exclude certain competitors from the market.

International trade policies may impact demand for our products and our competitive position.

Government policies on international trade and investment such as import quotas, capital controls or tariffs, whether adopted by individual governments or addressed by regional trade blocs, can affect the demand for our services, impact the competitive position of our products or prevent us from being able to sell products in certain countries. The implementation of more restrictive trade policies, such as more detailed inspections, higher tariffs or new barriers to entry, could negatively impact our business, results of operations and financial condition. For example, a government's adoption of "buy national" policies or retaliation by another government against such policies could have a negative impact on our results of operations.

Global operations are subject to extensive trade and anti-corruption laws and regulations.

The U.S. Foreign Corrupt Practices Act and similar foreign anti-corruption laws generally prohibit companies and their intermediaries from making improper payments or providing anything of value to improperly influence foreign government officials for the purpose of obtaining or retaining business or obtaining an unfair advantage. Recent years have seen a substantial increase in the global enforcement of anti-corruption laws. Our operations outside the United States could increase the risk of such violations. Violations of anti-corruption laws or regulations by our employees or by intermediaries acting on our behalf may result in severe criminal or civil sanctions, could disrupt our business, and result in an adverse effect on our business and results of operations or financial condition.

Risks Related to Our Stock

Our quarterly operating results could fluctuate significantly, which could cause our stock price to decline.

Our quarterly operating results have fluctuated in the past and are likely to fluctuate in the future. Our results are impacted by the extent to which we are able to gain new customers, both domestically and internationally, competitive pricing, and on the hiring practices of our existing customers, including seasonality. Demand for drug testing can be impacted by changes in government requirements regarding testing for drugs of abuse, delays in implementation of such requirements, as well as general economic conditions. Entering into new customer contracts can involve a long lead time. Accordingly, negotiation can be lengthy and is subject to a number of significant risks, including customers' budgetary constraints and internal reviews. Due to these and other market factors, our operating results could fluctuate significantly from quarter to quarter. In addition, we may experience significant fluctuations in quarterly operating results due to factors such as general and industry-specific economic conditions that may affect the budgets and the hiring practices of our customers.

Due to the possibility of fluctuations in our revenue and expenses, we believe that quarter-to-quarter comparisons of our operating results are not necessarily a good indication of our future performance. Our operating results in some quarters may not meet the expectations of stock market analysts and investors. If we do not meet analysts' and/or investors' expectations, our stock price could decline.

Payment of a dividend could decline or cease.

Following the first quarter 2020, in connection with, and as a result of the COVID-19 pandemic and related government programs adopted in response to the COVID-19 pandemic, we suspended our quarterly dividend throughout the remainder of 2020 and a majority of 2021. However, we paid dividends on our common stock in the fourth quarter of 2021. Because the Company has historically paid dividends, the cessation of, or reduction in our quarterly dividend could adversely affect our stock price. We currently expect to pay quarterly dividends in the future, although such payments are at the discretion of our Board of Directors, and will depend upon our financial condition, results of operations, capital requirements, government requirements and restrictions and other factors that our Board of Directors may consider at its discretion. In the absence of dividends, a return on investment in our common stock depends entirely upon future appreciation. There is no guarantee that our common stock will appreciate in value or even maintain the price at which stockholders have purchased their shares.

Our stock price could experience substantial volatility.

The market price of our common stock has historically experienced and may continue to experience extensive volatility. Our quarterly operating results, the success or failure of future development efforts, changes in general conditions in the economy or the financial markets and other developments affecting our customers, our distributors, our competitors or us could cause the market price of our common stock to fluctuate substantially. This volatility may adversely affect the price of our common stock. In the past, securities class action litigation has often been instituted following periods of volatility in the market price of a company's securities. A securities class action suit against us could result in potential liabilities, substantial costs and the diversion of management's attention and resources, regardless of whether we win or lose.

The general economic condition could deteriorate.

Our business is dependent upon new hiring and the supply of new jobs created by overall economic conditions. If the economy deteriorates, leading to a downturn in new job creation, our business and stock price could be adversely affected.

Item 1B. Unresolved Staff Comments

Not applicable.

Item 2. Properties

The Company maintains its corporate offices and northeast sales offices at 289 Great Road, Acton, Massachusetts, 01720; the office consists of six thousand square feet and is leased through February 2024.

The Company leases two facilities for laboratory purposes in Culver City, California. The first is fourteen thousand square feet of space with an additional ten thousand square feet of storage space. This facility is leased through December 2022. The second facility of sixteen thousand square feet is leased through March 2025.

Item 3. Legal Proceedings

Information pertaining to legal proceedings can be found in Item 8. Financial Statements and Supplementary Data Note 9 - "Commitments and Contingencies".

Item 4. Mine Safety Disclosures

Not applicable.

PART II

Item 5. Market for Registrant's Common Equity, Related Shareholder Matters and Issuer Purchases of Equity Securities

The Company's common stock is traded on the NASDAQ Stock Market under the symbol "PMD". As of March 24, 2022, there were 157 record holders of the Company's common stock. The number of record owners was determined from the Company's stockholder records maintained by the Company's transfer agent and does not include beneficial owners of the Company's common stock whose shares are held in the names of various security holders, dealers and clearing agencies. The Company believes that the number of beneficial owners of the Company's common stock held by others as or in nominee names exceeds 3,100.

The following table sets forth for the periods indicated the range of prices for the Company's common stock as reported by the NASDAQ Stock Market and dividends declared by the Company.

	High	Low	Dividends
Fiscal 2021:			
First Quarter	\$ 7.90	\$ 4.95	\$ -
Second Quarter	8.36	6.20	-
Third Quarter	8.60	8.05	-
Fourth Quarter	8.90	6.76	0.05
Fiscal 2020:			
First Quarter	\$ 10.69	\$ 4.54	\$ 0.18
Second Quarter	6.79	4.89	-
Third Quarter	6.35	4.33	-
Fourth Quarter	5.44	3.58	-

The Company most recently declared a dividend on December 10, 2021, which was paid on December 30, 2021. The Company's current intention is to continue to declare and pay dividends to the extent funds are available and not required for operating purposes or capital requirements, and only then, upon approval by the Board of Directors.

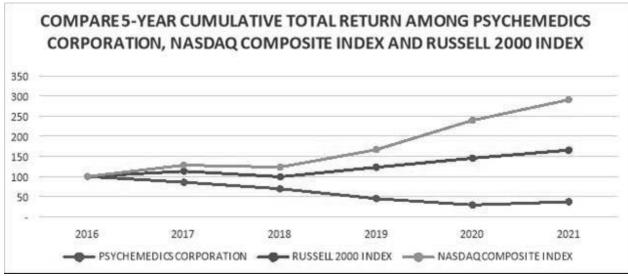
Issuer Purchases of Equity Securities

During 2021, the Company did not repurchase any common shares for treasury.

Unregistered Sales of Equity Securities and Use of Proceeds

There were no unregistered sales of common stock of the Company during 2021.

Performance Graph



Calculated by the Company using www.yahoo.com/finance historical prices.

	2016	2017	2018	2019	2020	2021
PSYCHEMEDICS CORPORATION	100.00	85.74	69.53	45.22	29.50	37.52
RUSSELL 2000 INDEX	100.00	113.14	99.37	122.94	145.52	165.45
NASDAQ COMPOSITE INDEX	100.00	128.24	123.26	166.68	239.42	290.63

- (1) The above graph assumes a \$100 investment on December 31, 2016, through the end of the 5-year period ended December 31, 2021, in the Company's Common Stock, the Russell 2000 Index and the NASDAQ Composite Index. The prices all assume the reinvestment of dividends.
- (2) The Russell 2000 Index is composed of the smallest 2,000 companies in the Russell 3,000 Index. The Company has been unable to identify a peer group of companies that engage in testing of drugs of abuse, except for large pharmaceutical companies where such business is insignificant to such companies' other lines of businesses. The Company therefore uses in its proxy statements a peer index based on market capitalization.
- (3) The NASDAQ Composite Index includes companies whose shares are traded on the NASDAQ Stock Market.

Item 6. Selected Financial Data

The selected financial data presented below is derived from our financial statements and should be read in connection with those statements.

	Year Ended December 31,									
		2021		2020		2019		2018		2017
				(In thousa	ands	, except for j	per s	hare data)		
Revenues	\$	24,909	\$	21,360	\$	37,678	\$	42,674	\$	39,701
Gross profit		10,264		4,886		16,444		20,618		19,822
Operating income (loss)		209		(6,066)		2,998		7,610		8,157
Net (loss) income		(665)		(3,859)		1,542		4,584		6,121
Total assets		21,552		24,003		27,531		24,974		26,508
Working capital		4,455		5,657		7,016		9,810		9,640
Shareholders' equity		12,243		12,512		16,820		18,747		18,620
Basic net (loss) income per share	\$	(0.12)	\$	(0.70)	\$	0.28	\$	0.83	\$	1.12
Diluted net (loss) income per share	\$	(0.12)	\$	(0.70)	\$	0.28	\$	0.83	\$	1.10
Cash dividends declared per common share	\$	0.05	\$	0.18	\$	0.72	\$	0.69	\$	0.60

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

The Management's Discussion and Analysis of Financial Condition and Results of Operations should be read together with the more detailed business information and financial statements and related notes that appear elsewhere in this annual report on Form 10-K. This annual report may contain certain "forward-looking" information within the meaning of the Private Securities Litigation Reform Act of 1995. This information involves risks and uncertainties. Actual results may differ materially from the results discussed in the forward-looking statements. Factors that might cause such a difference include, but are not limited to, those discussed in Item 14 — Risk Factors.

Overview

Psychemedics Corporation is the world's largest provider of hair testing for drugs of abuse, utilizing a patented hair analysis method involving digestion of hair, enzyme immunoassay technology and confirmation by mass spectrometry to analyze human hair to detect abused substances. The Company's customers include Fortune 500 companies, as well as small to mid-size corporations, schools and governmental entities, located in the United States and internationally. During the year ended December 31, 2021, the Company generated \$24.9 million in revenue, while realizing a gross profit of 41% and incurring a net loss of \$0.7 million and diluted net loss per share of \$0.12 for the year ended December 31, 2021, versus diluted net loss per share of \$0.70 from the prior year. One-time legal settlements of \$3.2 million and other non-routine activity significantly contributed to the net loss for the year ended December 31, 2021.

During 2020 and 2021, our volumes were materially impacted by the COVID-19 pandemic. Beginning in March 2020, the Company experienced a material decline in volumes driven by the federal, state, and local governmental policies and initiatives to reduce the transmission of COVID-19. During the third quarter of 2020, the Company began to experience a recovery in volumes, which continued into 2021. The recovery has been driven by people returning back to work, general condition of the economy and vaccination efforts.

As the Company disclosed in its Quarterly Report on Form 10-Q for the third quarter of 2021, and more recently in a Current Report on Form 8-K filed on December 10, 2021, the Company's Board of Directors authorized the Company to explore shareholder enhancement opportunities, including strategic alternatives, such as the potential sale or merger of the Company, capitalization optimization and dividend strategies. The Company continues to explore such opportunities. There can be no assurances that the shareholder enhancement review process will result in a transaction or other strategic change or outcome. The Company has not set a timetable for the conclusion of its review of strategic alternatives, and it does not intend to comment further unless and until the Board has approved a specific course of action or the Company has otherwise determined that further disclosure is appropriate or required by law. The Company's Board of Directors has designated a subcommittee of the Board to review shareholder enhancement opportunities. The Company has retained investment banking firms and corporate transaction legal advisors in connection with its exploration of shareholder enhancement opportunities.

The following table sets forth, for the periods indicated, the selected statements of operations data as a percentage of total revenue:

	Year Ended December 31,				
	2021	2020	2019		
Revenues	100.0 %	100.0 %	100.0 %		
Cost of revenues	58.8 %	77.1 %	56.4 %		
Gross profit	41.2 %	22.9 %	43.6%		
Operating Expenses:					
General & administrative	24.6%	28.5 %	19.1 %		
Marketing & selling	11.3 %	16.7 %	12.3 %		
Research & development	4.5 %	6.0 %	4.2 %		
Total Operating Expenses	40.4 %	51.2 %	35.6%		
Operating income (loss)	0.8 %	28.3 %	8.0%		
Other Income (Expense):					
Gain on forgiveness of PPP Loan	8.8%	0.0%	0.0%		
Settlements	-12.6%	0.0%	0.0%		
Other (expense) income	-0.2 %	-0.7 %	0.2 %		
Total Other Income (Expense)	-4.0 %	-0.7 %	0.2 %		
Net (loss) income before (benefit from) provision for income taxes	-3.2 %	-29.0%	8.2 %		
(Benefit from) provision for income taxes	-0.6 %	-11.0 %	4.0 %		
Net (loss) income	-2.6 %	-18.0 %	4.2 %		

Revenue by Geographic Region

	Year Ended December 31,										
		2021		2020		2019					
Consolidated Revenue:						_					
United States	\$	23,584	\$	19,486	\$	27,329					
Brazil		640		1,344		9,819					
Other		685		530		530					
Total Revenue	\$	24,909	\$	21,360	\$	37,678					

Results for the Year Ended December 31, 2021, Compared to Results for the Year Ended December 31, 2020 (in thousands)

	2021 2020		2020	Change	%	
Revenues	\$	24,909	\$	21,360	\$ 3,549	17 %
Cost of revenues		14,645		16,474	(1,829)	-11%
Gross profit		10,264		4,886	5,378	110 %
Operating Expenses:						
General & administrative		6,126		6,095	31	1 %
Marketing & selling		2,799		3,577	(778)	-22 %
Research & development		1,130		1,280	(150)	-12 %
Total Operating Expenses		10,055		10,952	(897)	-8 %
Operating income (loss)		209		(6,066)	6,275	103 %
Other Income (Expense):						
Gain on forgiveness of PPP Loan		2,181		-	2,181	100 %
Settlements		(3,150)		-	(3,150)	100 %
Other expense		(61)		(140)	79	-56%
Total Other Income (Expense)	-	(1,030)		(140)	(890)	636 %
Net loss before benefit from income taxes		(821)		(6,206)	 5,385	-87 %
Benefit from income taxes		(156)		(2,347)	2,191	-93 %
Net loss	\$	(665)	\$	(3,859)	\$ 3,194	-83 %

Revenue: The revenue increase of 17% was primarily due to a 9% increase in volume, compounded by an 8% increase in average revenue per sample, primarily as a result of business mix and increased domestic volumes. Domestic revenues increased by 21% compared to the prior year period, due to an increase in volume and growth in the base business. International revenues decreased by 29% from 2020 to 2021, due to decline in volume from unfavorable market forces in Brazil and the COVID-19 pandemic. See geographic breakdown of revenue above. The Company does not expect any material change in its Brazil driver license business as this market continues to be considerably uncertain.

Gross profit: The 110% increase in gross profit was due to higher sales volume and lower personnel costs. Higher volume and lower personnel costs was the primary factor in the gross profit percentage increase from 23% in 2020 to 41% in 2021. The decrease in lower labor and related costs was primarily due to the recognition of the refundable employee retention tax credits in 2021 and the retention of certain laboratory employees during 2020, to qualify for PPP Loan forgiveness with no offsetting proportional revenue.

General and administrative ("G&A") expenses: G&A expenses decreased 1% from 2020 to 2021, primarily driven by reductions in personnel costs after the PPP Loan covered period expired, cost-savings initiatives, including salary reductions; in response to the COVID-19 pandemic and refundable employee retention tax credits in 2021. These decreases were partially offset by higher legal expenses related to the exploration of possible strategic alternatives in an effort to enhance shareholder value. As a percentage of revenue, G&A expenses represented 24.6% in 2021 compared to 28.5% in 2020.

Marketing and selling expenses: Marketing and selling expenses decreased 22% from 2020 to 2021, primarily driven by cost reduction initiatives; specifically, lower personnel related costs (including less travel and meals) and in addition refundable employee retention tax credits. As a percentage of revenue, marketing and selling expenses represented 11.2% in 2021 compared to 16.7% in 2020.

Income Taxes: During the year ended December 31, 2021, the Company recorded a tax benefit of \$0.2 million representing a tax rate of 19% compared to a tax rate of 38% in 2020. For information regarding additional matters related to our taxes, please see Note 5 — "Income Taxes" to the Consolidated Financial Statements included in this Annual Report.

Results for the Year Ended December 31, 2020, Compared to Results for the Year Ended December 31, 2019 (in thousands)

	2020	2019	Change	%
Revenues	\$ 21,360	\$ 37,678	\$ (16,318)	-43 %
Cost of revenues	16,474	21,234	(4,760)	-22 %
Gross profit	 4,886	 16,444	(11,558)	-70 %
Operating Expenses:				
General & administrative	6,095	7,221	(1,126)	-16%
Marketing & selling	3,577	4,658	(1,081)	-23 %
Research & development	1,280	1,567	(287)	-18%
Total Operating Expenses	10,952	 13,446	 (2,494)	-19 %
Operating (loss) income	(6,066)	2,998	(9,064)	-302 %
Other (expense) income	(140)	58	(198)	-341 %
Net (loss) income before (benefit from)			 	
provision for income taxes	(6,206)	3,056	(9,262)	-303 %
(Benefit from) provision for income taxes	 (2,347)	1,514	 (3,861)	-255 %
Net (loss) income	\$ (3,859)	\$ 1,542	\$ (5,401)	-350 %

Revenue: The revenue decline of 43% was primarily due to a 56% decrease in volume, offset by a 13% increase in average revenue per sample. International revenue was down 82% from 2019 to 2020, due to decline in volume from unfavorable market forces in Brazil and the COVID-19 pandemic and domestic revenue was down 29% from 2019 to 2020, also due primarily to the COVID-19 pandemic. See geographic breakdown of revenue above. The Company does not expect any change in the decline it has experienced in its Brazil driver license business as this market continues to be considerably uncertain.

Gross profit: The 70% decrease in gross profit was primarily due to lower sales volume. This lower volume was the primary factor in the gross profit percentage reduction from 44% in 2019 to 23% in 2020. In addition, gross profit was also adversely impacted by a requirement that we retain certain levels of personnel to qualify for PPP Loan forgiveness with no offsetting proportional revenue. The staffing levels we maintained did not support the volume sales noted above.

General and administrative ("G&A") expenses: G&A expenses decreased 16% from 2019 to 2020, primarily driven by reductions in personnel costs after the PPP Loan covered period expired, cost-savings initiatives, including salary reductions, in response to the COVID-19 pandemic and lower international tax expense. These decreases were partially offset by higher legal expenses related to the exploration of possible strategic alternatives in an effort to enhance shareholder value. As a percentage of revenue, G&A expenses represented 28.5% in 2020 compared to 19.2% in 2019.

Marketing and selling expenses: Marketing and selling expenses decreased 23% from 2019 to 2020, primarily driven by cost reduction initiatives; specifically, lower personnel related costs (including less travel and meals). In addition, lower recruiting fees and commissions from volume decline contributed to the comparative decrease. As a percentage of revenue, marketing and selling expenses represented 16.7% in 2020 compared to 12.4% in 2019.

Income Taxes: During the year ended December 31, 2020, the Company recorded a tax benefit of \$2.3 million representing a tax rate of 38% compared to a tax rate of 50% in 2019. For information regarding additional matters related to our taxes, please see Note 5 – "Income Taxes" to the Consolidated Financial Statements included in this Annual Report.

Liquidity and Capital Resources

The Company had \$2.0 million and \$2.8 million of cash as of December 31, 2021, and 2020, respectively. The Company's operating activities generated net cash of \$0.4 million in 2021, used net cash of \$4.1 million in 2020 and generated net cash \$4.3 million in 2019. Investing activities used net cash of \$0.2 million and \$0.9 million in 2021 and 2020, respectively, and generated net cash of \$2.1 million in 2019. Financing activities used net cash of \$1.0 million in 2021, provided net cash of \$0.5 million in 2020 and used \$3.0 million in 2019.

Operating cash generated in operations of \$0.4 million in 2021 primarily reflected the net loss of \$0.7 million adjusted for PPP Loan forgiveness of \$2.2 million, depreciation and amortization of \$2.8 million and stock compensation expense of \$0.7 million. Cash generated in operations was also affected by the following changes in assets and liabilities: an increase in accounts receivable of \$0.8 million and an increase in accrued expenses of \$1.4 million. The \$4.5 million change in operating cash from a negative \$4.1 million in 2020 to a positive \$0.4 million in 2021 was primarily driven by improved operating results in 2021.

Operating cash used in operations of \$4.1 million in 2020 primarily reflected the net loss of \$3.9 million adjusted for depreciation and amortization of \$2.7 million, stock compensation expense of \$0.6 million, and a decrease in net deferred tax liabilities of \$0.3 million. Cash used in operations was also affected by the following changes in assets and liabilities: a decrease in accounts receivable of \$0.4 million, a decrease in accrued expenses of \$1.8 million, and a decrease in prepaid expenses (and other current assets) of \$1.6 million. The \$8.4 million change in operating cash from a positive \$4.3 million in 2019 to a negative \$4.1 million in 2020 was primarily driven by lower net income in 2020.

Cash used in investing activities primarily reflected the purchase of capital expenditures. Capital expenditures were \$0.2 million, \$1.0 million and \$1.7 million in 2021, 2020 and 2019, respectively. In 2021, the expenditures related principally to laboratory equipment, machinery, and computer software. Marketable securities transactions consisted of the sale of one certificate of deposit ("CD") for \$3.8 million in 2019.

Financing cash flow in 2021 primarily reflected repayments under the Equipment Loan Arrangement of \$0.7 million. During 2021, 2020 and 2019, the Company did not repurchase any shares of common stock for treasury. The Company has authorized 750,000 shares for repurchase since June of 1998, of which 250,000 shares of common stock were authorized in March of 2008 for repurchase. Since 1998, a total of 550,684 shares have been repurchased. The Company also distributed cash dividends to its shareholders of \$0.3 million in 2021, \$1.0 million in 2020 and \$4.0 million in 2019.

The Company's current intention is to continue to declare and pay dividends to the extent funds are available and not required for operating purposes or capital requirements, and only then, upon approval by the Board of Directors. There can be no assurance that in the future the Company will pay dividends.

At December 31, 2021, the Company's principal sources of liquidity included \$2.0 million of cash on hand. Management currently believes that such funds, together with future operating profits, should be adequate to fund anticipated working capital requirements, including debt obligations, and capital expenditures for at least the next 12 months. Depending upon the Company's results of operations, its future capital needs and available marketing opportunities, the Company may use various financing sources to raise additional funds. Such sources could include but are not limited to, issuance of common stock or debt financing, lines of credit, or equipment leasing; although there is no assurance that such financings will be available to the Company on terms it deems acceptable, if at all.

On May 4, 2020, the Company borrowed \$2.2 million from Bank of America, N.A., pursuant to the PPP, established under the CARES Act. These funds were used to maintain operations, including the employment of both exempt and non-exempt employees, in order to meet the drug testing needs of our customers and adhere to strict quality standards in the midst of the worldwide COVID-19 pandemic.

During the third quarter of 2021, the PPP Loan and accrued interest was 100% forgiven by the SBA. The PPP Loan exceeded \$2.0 million audit threshold established by the SBA, and therefore, also will be subject to audit by the SBA in the future.

Purchase Commitment

Operating leases consist of rent obligations for the company's facilities and corporate office. The Company has no significant contractual obligation for supply agreements as of December 31, 2021.

Critical Accounting Policies

The Company's significant accounting policies are described in Note 2 – "Summary of Significant Accounting Policies" included in Item 8 of this Annual Report. Management believes the most critical accounting policies are as follows:

Revenue Recognition

The Company is in the business of performing drug testing services and reporting the results thereof. The Company's services are primarily drug and alcohol testing for its customers for an agreed-upon fee per unit tested. The revenues are recognized when the drug test is performed and reported to the customer.

The Company records revenue for the shipping of samples from the customer or independent hair collection facility to the laboratory for customers that choose to use the Company's shipping account. The Company also records revenue for the collection of the hair sample for customers that choose to have the Company manage this process at the same time the sample test is completed and results reported to the customer. The associated costs incurred in connection with these services is recorded as costs of revenue. The Company records revenue for these services on a gross basis as it has determined it is the principal under these arrangements.

The Company also provides expert testimony, when and if necessary, to support the results of the tests, which is generally billed separately and recognized as the services are provided.

Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates, including legal contingencies, bad debts, long-lived asset lives, income tax valuation, stock-based compensation and assumptions that affect the reported amounts of assets and liabilities and 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. Actual results could differ from those estimates.

Capitalized Development Cost

We capitalize costs related to significant software projects developed or obtained for internal use in accordance with U.S. generally accepted accounting standards. Costs incurred during the preliminary project work stage or conceptual stage, such as determining the performance requirements, system requirements and data conversion, are expensed as incurred. Costs incurred in the application development phase, such as coding, testing for new software and upgrades that result in additional functionality, are capitalized and are amortized using the straight-line method over the useful life of the software for between three to five years. Costs incurred during the post-implementation/operation stage, including training costs and maintenance costs, are expensed as incurred. We capitalized internally developed software costs of \$99 thousand, \$213 thousand and \$234 thousand during the years ended December 31, 2021, 2020 and 2019, respectively. The software development is for primarily for two projects. Determining whether particular costs incurred are more properly attributable to the preliminary or conceptual stage, and thus expensed, or to the application development phase, and thus capitalized and amortized, depends on subjective judgments about the nature of the development work, and our judgments in this regard may differ from those made by other companies. General and administrative costs related to developing or obtaining such software are expensed as incurred.

Allowance for Doubtful Accounts

The allowance for doubtful accounts is based on management's assessment of the ability to collect amounts owed to it by its customers. Management reviews its accounts receivable aging for doubtful accounts and uses a methodology based on calculating the allowance using a combination of factors including the age of the receivable along with management's judgment to identify accounts that may not be collectible. The Company routinely assesses the financial strength of its customers and, as a consequence, believes that its accounts receivable credit risk exposure is limited. The Company maintains an allowance for potential credit losses but historically has not experienced any significant losses related to individual customers or groups of customers in any particular industry or geographic area. Bad debt expense has been within management's expectations.

Contingencies

In the normal course of business, we are subject to contingencies, such as legal proceedings and claims arising out of our business, which include class action allegations, that cover a wide range of matters, including, among others, government investigations, product liability, contractual claims and tax matters. In general, we do not have insurance coverage for class action lawsuits. We are also involved in various other legal actions arising in the normal course of business, for which insurance coverage may or may not be available depending on the nature of the action. We recognize accruals for such contingencies when it is probable that a liability will be incurred, and the amount of the loss can be reasonably estimated. These estimates are subject to uncertainties that are difficult to predict and, as such, actual results could vary from these estimated.

Income Taxes

The Company accounts for income taxes using the liability method, which requires the Company to recognize a current tax liability or asset for current taxes payable or refundable and a net deferred tax liability for the estimated future tax effects of temporary differences between the financial statement and tax reporting bases of assets and liabilities to the extent that they are realizable. Deferred tax expense (benefit) results from the net change in deferred tax assets and liabilities during the year. A deferred tax valuation allowance is required if it is more likely than not that all or a portion of the recorded deferred tax assets will not be realized.

The Company operates within multiple taxing jurisdictions and could be subject to audit in these jurisdictions. These audits may involve complex issues, which may require an extended period of time to resolve. The Company has provided for its estimated taxes payable in the accompanying financial statements. The Company did not have any interest or penalties accrued as of December 31, 2021, or 2020. The Company does not expect the unrecognized tax benefits to change significantly over the next twelve months.

The above listing is not intended to be a comprehensive list of all of the Company's accounting policies. In many cases, the accounting treatment of a particular transaction is specifically dictated by accounting principles generally accepted in the United States, with no need

for management's judgment in their application. There are also areas in which management's judgment in selecting any available alternative would not produce a materially different result.

Recent Accounting Pronouncements

See Note 2 – "Summary of Significant Accounting Policies" in the accompanying Notes to the Consolidated Financial Statements included in this Annual Report for further detail on recent accounting pronouncements.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

Not required.

Item 8. Financial Statements and Supplementary Data

(a) Financial Statements:

	Page
Report of Independent Registered Public Accounting Firm (BDO USA, LLP; Boston, Massachusetts; PCAOB ID# 243)	20
Consolidated Balance Sheets as of December 31, 2021 and 2020	21
Consolidated Statements of Operations and Comprehensive Income (Loss) for the Years Ended December 31, 2021, 2020 and 2019	22
Consolidated Statements of Shareholders' Equity for the Years Ended December 31, 2021, 2020 and 2019	23
Consolidated Statements of Cash Flows for the Years Ended December 31, 2021, 2020 and 2019	24
Notes to Consolidated Financial Statements	25

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Shareholders and Board of Directors Psychemedics Corporation Acton, Massachusetts

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of Psychemedics Corporation (the "Company") and subsidiaries as of December 31, 2021 and 2020, the related consolidated statements of operations and comprehensive income/(loss), shareholders' equity, and cash flows for each of the three years in the period ended December 31, 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 financial position of the Company and subsidiaries at December 31, 2021 and 2020, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 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 audits. 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 audits in accordance with the standards of the PCAOB. 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 audits 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 audits 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 audits 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 audits provide 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.

/s/ BDO USA, LLP

We have served as the Company's auditor since 2004.

Boston, Massachusetts March 30, 2022

PSYCHEMEDICS CORPORATION CONSOLIDATED BALANCE SHEETS

(in thousands, except par value)

	December 2021	r 31,		ember 31, 2020
ASSETS				
Current Assets:				
Cash	\$	1,992	\$	2,833
Accounts receivable, net of allowance for doubtful accounts of \$89 and \$37 at December 31,		1 116		2 256
2021 and 2020, respectively Prepaid expenses and other current assets		4,116 1,499		3,356 914
Income tax receivable		2,678		2,495
income tax receivable		2,076	-	2,493
Total Current Assets	1	10,285		9,598
Property and equipment:				
Computer software		4,521		4,422
Office furniture and equipment		2,195		2,139
Laboratory equipment	1	16,005		15,978
Leasehold improvements		3,629		3,629
•		26,350		26,168
Accumulated depreciation and amortization	()	19,659)		(16,937)
•		6,691		9,231
Other assets		864		888
Net deferred tax assets		160		_
Operating lease right-of-use assets		3,552		4,286
Total Assets	\$ 2	21,552	\$	24,003
LIABILITIES AND SHAREHOLDERS' EQUITY				
Current Liabilities:	Φ.	004	Ф	
Accounts payable	\$	994	\$	577
Accrued expenses.		3,188		1,801
Current portion of long-term debt		664		688
Current portion of operating lease liabilities	-	984		875
Total Current Liabilities		5,830		3,941
Long-term debt		599		3,444
Net deferred tax liabilities		-		211
Long-term portion of operating lease liabilities		2,880		3,895
Total Liabilities		9,309		11,491
Commitments and Contingencies (Note 9) Shareholders' Equity:				
Preferred stock, \$0.005 par value, \$73 shares authorized, no shares issued or outstanding		-		-
Common stock, \$0.005 par value; 50,000 shares authorized 6,257 shares and 6,205 shares issued at December 31, 2021 and 2020, respectively, 5,589 shares outstanding and 5,537 shares outstanding at December 31, 2021 and 2020, respectively		21		21
Additional paid-in capital	,	31 33,478		31 32,803
Less - Treasury stock, at cost, 668 shares		10,082)		(10,082)
Accumulated deficit	,	9,550)		(8,606)
Accumulated deficit		1,634)		
Accumulated offici completicity toss		1,034)		(1,634)
Total Shareholders' Equity	1	12,243		12,512
Total Liabilities and Shareholders' Equity	\$ 2	21,552	\$	24,003

PSYCHEMEDICS CORPORATION CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME/(LOSS)

(in thousands, except per share amounts)

	Year Ended December 31,						
		2021		2020		2019	
Revenues	\$	24,909 14,645 10,264	\$	21,360 16,474 4,886	\$	37,678 21,234 16,444	
Gross prom		10,201		1,000			
Operating Expenses: General & administrative		6,126		6,095		7,221	
Marketing & selling		2,799		3,577		4,658	
Research & development		1,130		1,280		1,567	
Total Operating Expenses Operating income (loss)		10,055		10,952 (6,066)		13,446 2,998	
Other Income (Expense):							
Gain on forgiveness of PPP Loan		2,181		-		-	
Settlements		(3,150)		-		-	
Other (expense) income		(61)		(140)		58	
Total Other Income (Expense)		(1,030)		(140)		58	
Net (loss) income before (benefit from) provision for income taxes		(821)		(6,206)		3,056	
(Benefit from) provision for income taxes		(156)		(2,347)		1,514	
Net (loss) income	\$	(665)	\$	(3,859)	\$	1,542	
Other Comprehensive (Loss) Income:							
Foreign currency translation, net of taxes			-	(10)	_	(225)	
Total Comprehensive (Loss) Income	\$	(665)	\$	(3,869)	\$	1,317	
Basic net (loss) income per share	\$	(0.12)	\$	(0.70)	\$	0.28	
Diluted net (loss) income per share	\$	(0.12)	\$	(0.70)	\$	0.28	
Dividends declared per share	\$	0.05	\$	0.18	\$	0.72	
Weighted average common shares outstanding:							
Basic		5,549		5,524		5,514	
Diluted	===	5,549		5,524		5,525	

PSYCHEMEDICS CORPORATION CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY (in thousands, except per share amounts)

	Comm	on Stock		Treasi	ıry Stock		Accumulated Other		
		\$0.005 Paid-In			21 / 20021	Accumulated	Comprehensive		
	Shares	par Value	Capital	Shares	Cost	Deficit	Income (loss)	Total	
BALANCE, December 31,									
2018	6,175	31	31,523	668	(10,082)	(1,326)	(1,399)	18,747	
Shares issued – vested	10	-	-	-	-	-		-	
Tax withholding related to vested shares from			(33)					(22)	
employee stock plans	-	-	(33)	-	-	-	-	(33)	
Stock compensation expense		_	759	_	_	_	_	759	
Cash dividends declared	_	_	137	_	_	_	_	137	
(\$0.72 per share)	_	_	_	_	_	(3,970)	_	(3,970)	
Net income	_	_	_	_	_	1,542	_	1,542	
Foreign currency						1,542		1,542	
translation, net of taxes	_	_	_	_	_	_	(225)	(225)	
BALANCE, December 31,		-							
2019	6,185	31	32,249	668	(10,082)	(3,754)	(1,624)	16,820	
Shares issued - vested	20	-	-	-	-	-		-	
Tax withholding related to vested shares from									
employee stock plans	-	-	(9)	-	-	-	=	(9)	
Stock compensation									
expense	-	-	563	-	-	-	-	563	
Cash dividends declared									
(\$0.18 per share)	-	-	-	-	-	(993)	=	(993)	
Net loss	-	-	-	-	-	(3,859)	-	(3,859)	
Foreign currency									
translation, net of taxes		-					(10)	(10)	
BALANCE, December 31,									
2020	6,205	\$ 31	\$ 32,803	668	\$ (10,082)	\$ (8,606)	\$ (1,634)	\$ 12,512	
Shares issued – vested	51	-	-	-	-	-	-	-	
Exercise of stock options	1	-	4	-	-	-	-	4	
Tax withholding related to vested shares from									
employee stock plans	-	-	(72)	-	-	-	-	(72)	
Stock compensation expense	_	_	743	_	_	_	_	743	
Cash dividends declared	-	_	773	-	-	-	-	773	
(\$0.05 per share)	_	_	_	_	_	(279)	_	(279)	
Net loss	=	_	-	_	_	(665)	_	(665)	
BALANCE, December 31,		-			. ———	(003)		(003)	
2021	6,257	\$ 31	\$ 33,478	668	\$ (10,082)	\$ (9,550)	\$ (1,634)	\$ 12,243	

PSYCHEMEDICS CORPORATION CONSOLIDATED STATEMENTS OF CASH FLOWS (in thousands)

	Year Ended December 31,					
		2021		2020		2019
						<u> </u>
Cash flows from operating activities:						
Net (loss) income	\$	(665)	\$	(3,859)	\$	1,542
Adjustments to reconcile net (loss) income to net cash provided by						
operating activities:						
Forgiveness of PPP loan		(2,181)		-		-
Depreciation and amortization		2,784		2,691		2,914
ROU asset amortization		906		935		-
Deferred income taxes		(371)		(339)		(405)
Loss on sale of fixed assets		-		94		-
Non-cash interest income (expense)		-		-		33
Stock compensation expense		743		563		759
Changes in operating assets and liabilities:						
Accounts receivable		(760)		424		1,049
Prepaid expenses and other current assets		(585)		392		64
Income tax receivable		(183)		(2,013)		(482)
Accounts payable		417		(281)		(494)
Operating lease liabilities		(1,078)		(914)		-
Accrued expenses		1,387		(1,776)		(671)
Net cash provided by (used in) operating activities		414		(4,083)		4,309
				<u> </u>		
Cash flows from investing activities:						
Proceeds from sale of fixed assets		_		140		-
Proceeds from short-term investments		-		-		3,810
Other assets		(38)		(7)		(56)
Purchases of property and equipment and capitalized software development		` /		. ,		,
costs		(182)		(991)		(1,677)
Net cash (used in) provided by investing activities		(220)		(858)		2,077
Cash flows from financing activities:						
Cash dividends paid		(279)		(993)		(3,970)
Proceeds from stock options and tax withholding related to vested shares						
from employee stock plans		(68)		(9)		(33)
Proceeds from PPP Loan.		` _		2,181		· -
Proceeds from equipment financing		_		· -		1,416
Payments of equipment financing		(688)		(678)		(415)
Net cash (used in) provided by financing activities		(1,035)		501		(3,002)
()1		())				(-))
Effect of exchange rate changes on cash		-		(10)		(170)
Net (decrease) increase in cash and cash equivalents		(841)		(4,450)		3,214
Cash, beginning of year.		2.833		7.283		4,069
Cash, end of year		1,992	\$		\$	7,283
Cush, old of your	Ψ	1,552	Ψ	2,033	Ψ	7,203
Supplemental disclosures of cash flow information:						
Cash paid for income taxes	\$	405	\$	249	\$	2,898
Cash paid for interest		50	_			59
•			\$		\$	
Cash paid for operating leases		1,151	\$		\$	1,199
Right-of-use assets acquired through operating leases	\$	172	\$	2,346	\$	4,363
Non-cash investing and financing activities:						
Purchases of equipment through accounts payable and accrued liabilities	\$		\$	241	\$	1,882
-			_			

1. Nature of Business

Company Overview

Psychemedics Corporation (the "Company") provides hair testing for drugs of abuse, utilizing a patented hair analysis method involving digestion of hair, enzyme immunoassay and mass spectrometry to analyze hair to detect abused substances. The Company's customers include Fortune 500 companies, as well as small to mid-size corporations, schools and governmental entities located in the United States and Internationally.

COVID-19 Pandemic

The outbreak of coronavirus ("COVID-19") which was declared by the World Health Organization to be a pandemic, has, and is expected to continue to impact worldwide economic activity. While our domestic business has been deemed an essential business and we continue to provide services to our customers, COVID-19 has had a significant impact on our entire operations. Additionally, COVID-19's effect on the overall economy has had an adverse impact on hiring, which is having a negative impact on our testing volume.

The Coronavirus Aid, Relieve and Economic Security Act ("CARES") Act, enacted on March 27, 2020, and the Families First Coronavirus Response Act, in each case modified by the Consolidated Appropriations Act enacted in December 2020, were emergency economic stimulus packages that included spending provisions and tax cuts to strengthen the United States economy and to fund a nationwide effort to curtail the effect of COVID-19. The principal impact of the CARES Act and subsequent legislation was the adoption of the Paycheck Protection Program ("PPP"). The CARES Act, together with subsequent legislation, also provided sweeping tax changes in response to the COVID-19 pandemic, including amendments to certain provisions of the previously enacted Tax Cuts and Jobs Act. The Company recognized a benefit of \$2.6 million and \$0.2 million for the years ended December 31, 2021, and December 31, 2020, respectively, as a reduction to cost of revenues and operating expenses related to the employee retention credit which was a tax provision in the CARES Act and subsequent legislation. Additionally, the CARES Act allowed the Company to fully carryback the 2020 net operating loss, for a refund of corporate income taxes previously paid.

Liquidity and Management's Plans

At December 31, 2021, the Company's principal sources of liquidity included \$2.0 million of cash on hand. Management currently believes that such funds, together with future operating profits, should be adequate to fund anticipated working capital requirements, including debt obligations, and capital expenditures for at least the next 12 months. Depending upon the Company's results of operations, its future capital needs and available marketing opportunities, the Company may use various financing sources to raise additional funds. Such sources could include but are not limited to, issuance of common stock or debt financing, lines of credit, or equipment leasing, although there is no assurance that such financings will be available to the Company on terms it deems acceptable, if at all.

2. Summary of Significant Accounting Policies

Risks and Uncertainties

The Company is subject to a number of risks and uncertainties similar to those of other companies, such as those associated with the continued expansion of the Company's sales and marketing network, technological developments, intellectual property protection, development of markets for new products and services offered by the Company, the economic health of principal customers of the Company, financial and operational risks associated with expansion of testing facilities used by the Company, government regulation (including, but not limited to, FDA regulations, proposed laws and regulations, and delays in implementation of laws and regulations), competition and general economic conditions.

Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the U.S. requires management to make estimates, including those related to bad debts, long-lived asset lives, income tax valuation and share based compensation, and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. Changes in estimates are recorded in the period in which they become known.

Cash and Cash Equivalents

The Company considers all highly liquid investments with original maturities at the date of purchase of 90 days or less as cash equivalents. As of December 31, 2021 and 2020, there were no investments classified as cash equivalents.

2. Summary of Significant Accounting Policies (continued)

Property and Equipment

Property & equipment are recorded at cost. Depreciation and amortization is computed over the estimated useful lives of the assets, using the straight-line method. Repair and maintenance costs are expensed as incurred. The estimated useful lives of the assets are:

Computer software (years)	3	to	5	
Office furniture and equipment (years)	3	to	7	
Laboratory equipment (years)	5	to	7	
Leasehold improvements	Lesser of estimated useful life			
	Ot	lease te	erm	

The Company recorded depreciation and amortization related to property and equipment and capitalized software of \$2.7 million, \$2.6 million, and \$2.9 million in 2021, 2020 and 2019, respectively. The Company had \$0.5 million of capitalized software and equipment that was not placed in service as of December 31, 2021, which is included as a component of computer software on the accompanying consolidated balance sheets.

Capitalized Software Development Costs

We capitalize costs related to significant software projects developed or obtained for internal use, including costs incurred in a cloud computing arrangement. Costs incurred during the preliminary project work stage or conceptual stage, such as determining the performance requirements, system requirements and data conversion, are expensed as incurred. Costs incurred in the application development phase, such as coding, testing for new software and upgrades that result in additional functionality, are capitalized and are amortized using the straight-line method over the useful life of the software for three to five years. Costs incurred during the post-implementation/operation stage, including training costs and maintenance costs, are expensed as incurred. In accordance with Company policy, during the years ended December 31, 2021, and 2020, we capitalized internally developed software costs of \$99 thousand and \$213 thousand, respectively. Amortization expense related to software development costs was \$421 thousand, \$293 thousand and \$457 thousand in 2021, 2020 and 2019, respectively. Determining whether particular costs incurred are more properly attributable to the preliminary or conceptual stage, and thus expensed, or to the application development phase, and thus capitalized and amortized, depends on subjective judgments about the nature of the development work, and our judgments in this regard may differ from those made by other companies. General and administrative costs related to developing or obtaining such software is expensed as incurred.

Other Assets

Other assets primarily consist of capitalized legal costs relating to patent applications. The Company amortizes these costs over the lesser of the legal life or estimated useful life of the patent from the date of grant of the applicable patent. The typical life is twenty years. As of December 31, 2021, the Company had capitalized legal costs relating to patent applications of \$1.1 million with accumulated amortization of \$0.4 million, for a net balance of \$0.7 million. As of December 31, 2020, the Company had capitalized legal costs relating to patent applications of \$1.0 million with accumulated amortization of \$0.3 million, for a net balance of \$0.7 million. Amortization expense was \$62 thousand, \$62 thousand, and \$40 thousand in 2021, 2020 and 2019, respectively. The amount of amortization related to patent applications is expected to remain below \$100 thousand per year for the next five years.

Revenue Recognition

The Company is in the business of performing drug testing services and reporting the results thereof. The Company's services are primarily drug and alcohol testing for its customers for an agreed-upon fee per unit tested. The revenues are recognized when the drug test is performed and reported to the customer.

Revenue is recognized when control of the services is transferred to our customers, in an amount that reflects the consideration (none of which is variable) the Company expects to be entitled to in exchange for those services. The Company typically invoices customers monthly for services provided and payments are generally due within 30 to 60 days of the invoice date.

2. Summary of Significant Accounting Policies (continued)

The table below disaggregates our external revenue by major source (in thousands). For additional revenue detail relating to geographic breakdown of sales, see Note 13 – "Business Segment Reporting".

	Year Ended December 31,						
		2021		2020		2019	
Consolidated Revenue:							
Testing	\$	21,894	\$	19,068	\$	34,555	
Shipping / Collection (hair)		2,847		2,174		2,876	
Other		168		118		247	
Total Revenue	\$	24,909	\$	21,360	\$	37,678	

Testing Revenue

Drug and alcohol tests for drugs of abuse using hair, performed in the Company's forensic laboratory in California, represents our primary service. Sales to customers are initiated through sales agreements, most of which have standard terms. Most tests are identified through a chain of custody form ("CCF") and can therefore be uniquely tracked. Revenue is recognized when performance obligations under the terms of the contract with a customer are satisfied; generally, this occurs with the transfer of control of our service, which occurs at a specific point-in-time. The specific point-in-time is the completion of the test and availability of test results to the customer. Most tests are completed the same day that the hair specimen is received.

Substantially all tests are completed within a few days once received for processing at our laboratory in California. As the tests are performed in a forensic laboratory, the exact date and time of each test completion is available and used in the timing of recognition of revenue.

Revenue is measured as the amount of consideration the Company expects to receive in exchange for providing services. Sales taxes the Company pays concurrent with revenue-producing activities are excluded from revenue.

Shipping and Hair Collection Revenue

Shipping revenue represents the amount billed to customers related to shipping of the hair specimen and CCF (collectively called the "sample") to the Company's laboratory. Collection revenue represents the amount billed to customers related to the collection of the hair specimen. This collection is done by third parties who have contracted with the Company. Shipping and hair collection revenue is recognized when performance obligations under the terms of the contract with a customer are satisfied; generally, this occurs with the transfer of control of the Company's service, which occurs at a specific point-in-time. The specific point-in-time is the completion of the test (associated with the shipping or hair collection charge) and availability of test results to the customer.

Revenue is measured as the amount of consideration the Company expects to receive in exchange for providing services. As the Company controls the service before transferring to the customer, it is considered a principal in the transaction, and therefore records revenues on gross basis, with shipping and hair collection costs in costs of revenues.

Other Revenue

Other revenue represents several items including: urine testing performed by other labs, medical review officer charges, legal/testifying services, and other miscellaneous charges. The total of all these items is less than 1% of total revenue. The amounts are generally billed to customers as services are performed, which occurs at a specific point-in-time.

Practical Expedients and Exemptions

The Company generally expenses sales commissions when incurred as they are typically not related to costs to fulfill customer contracts but relate to overall sales targets. These costs are recorded within marketing and selling expense on the accompanying consolidated statements of operations.

Research and Development Expenses

The Company expenses all research and development costs as incurred.

Contingencies

Loss contingencies from legal proceedings and claims may occur from government investigations, shareholder lawsuits, product liability, contractual claims, tax and other matters. Accruals are recognized when it is probable that a liability will be incurred, and the amount of loss can be reasonably estimated. Legal fees are expensed as incurred.

2. Summary of Significant Accounting Policies (continued)

Income Taxes

The Company accounts for income taxes using the liability method pursuant to ASC 740, "Income Taxes". Under this method, the Company recognizes deferred tax assets and liabilities for the expected tax consequences of temporary differences between the tax bases of assets and liabilities and their reported amounts using enacted tax rates in effect for the year the differences are expected to reverse. The Company evaluates uncertain tax positions annually and considers whether the amounts recorded for income taxes are adequate to address the Company's tax risk profile. The Company analyzes the potential tax liabilities of specific transactions and tax positions based on management's judgment as to the expected outcome.

Concentration of Credit Risk and Off-Balance Sheet Risk

The Company has no significant off-balance-sheet risk such as foreign exchange contracts, option contracts, or other foreign hedging arrangements. Financial instruments that potentially subject the Company to concentrations of credit risk are principally cash and accounts receivable. The Company's policy is to place its cash in high quality financial institutions. At time, these deposits may exceed or be exempt from federally insured limits. The Company does not believe significant credit risk exists with respect to these institutions. Concentration of credit risk with respect to accounts receivable is limited to certain customers to whom the Company makes substantial sales. To reduce risk, the Company routinely assesses the financial strength of its customers and, as a consequence, believes that its accounts receivable credit risk exposure is limited. The Company maintains an allowance for potential credit losses but historically has not experienced any significant losses related to individual customers or groups of customers in any particular industry or geographic area. The Company does not require collateral.

Significant Customers and Concentration of Credit Risk

The Company had no customers that represented 10% or more of total revenue for the years ended December 31, 2021, and 2020, respectively. The Company had one customer that represented 26% of total revenue for the year ended December 31, 2019. The Company had no customers account for 10% or more of the total accounts receivable balance as of December 31, 2021, and 2020, respectively.

Stock-Based Compensation

The Company accounts for equity awards in accordance with ASC 718, "Compensation — Stock Compensation" ("ASC 718"). ASC 718 requires employee equity awards to be accounted for under the fair value method. It also requires the measurement of compensation cost at fair value on the date of grant and recognition of compensation expense over the service period for awards expected to vest. Accordingly, share-based compensation is measured at the grant date based on the fair value of the award. The Company uses the straightline method to recognize share-based compensation over the service period of the award, which is generally equal to the vesting period. The Company uses the simplified approach to calculate the expected exercise date of options, which is one of the components used to determine the fair value of the options. This approach is used due to the small number of recipients receiving stock options not providing a reasonable basis for estimating expected term. In 2016, the Company adopted ASU 2016-09, Improvements to Employee Share-Based Payment Accounting, which simplifies several aspects of the accounting for employee share-based payment transactions including the accounting for income taxes, forfeitures, and statutory tax withholding requirements, as well as classification of related amounts within the statement of cash flows. As a result, we recognize the impact of forfeitures when they occur with no adjustment for estimated forfeitures and recognize excess tax benefits as a reduction of income tax expense regardless of whether the benefit reduces income taxes payable.

Stock compensation expense by income statement account is as follows (in thousands):

Year Ended December 31,						
	2021		2020		2019	
\$	63	\$	50	\$	59	
	503		380		579	
	114		74		54	
	63		59		67	
\$	743	\$	563	\$	759	
		\$ 63 503 114 63	2021 \$ 63 \$ 503 114 63	2021 2020 \$ 63 \$ 50 503 380 114 74 63 59 59	2021 2020 \$ 63 503 380 114 74 63 59	

See Note 7 – "Stock-Based Awards" for additional information relating to the Company's stock plan.

2. Summary of Significant Accounting Policies (continued)

Basic and Diluted Net Income (Loss) per Share

Basic net income (loss) per share is computed by dividing net income (loss) available to common shareholders by the weighted average number of common shares outstanding during the period. Diluted net income per share is computed by dividing net income (loss) available to common shareholders by the weighted average number of common shares and dilutive common stock equivalents outstanding during the period. The number of dilutive common stock equivalents outstanding during the period has been determined in accordance with the treasury-stock method. Common equivalent shares consist of common stock issuable upon the exercise of outstanding options and the unvested portion of stock unit awards ("SUAs").

Basic and diluted weighted average common shares outstanding are as follows (in thousands):

2021	2020	2019
5,549	5,524	5,514
-	-	11
5,549	5,524	5,525
	5,549	5,549 5,524

For the years ended December 31, 2021, 2020 and 2019, options to purchase 545 thousand, 588 thousand and 357 thousand common shares were outstanding but not included in the dilutive common equivalent share calculation as their effect would have been anti-dilutive.

Financial Instruments

Financial instruments include cash, accounts receivable and accounts payable. Estimated fair values of these financial instruments approximate carrying values due to their short-term nature. The Company has two outstanding equipment loans. One had an interest rate of the 30-day LIBOR rate + 1.75% and the other has a fixed interest rate of 3.79%. As there is a market interest rate, the carrying amount is fair value.

Basis of Preparation and Consolidation

The consolidated financial statements include the financial statements of the Company and its wholly-owned subsidiaries have been prepared using accounting principles generally accepted in the United States ("U.S. GAAP"). All intercompany transactions and balances have been eliminated.

Foreign Currency Translation

To the extent sales are made through our Brazil subsidiary, such sales are transacted in Brazilian Real and translated into US dollars. Foreign currency denominated assets and liabilities are translated into U.S. dollars using the exchange rates in effect at the consolidated balance sheet date. Results of operations and cash flows are translated using the average exchange rates throughout the period. The effect of exchange rate fluctuations on translation of assets and liabilities that are in the functional currency is included as a component of shareholders' equity in accumulated other comprehensive income (loss). The total change in foreign currency translation adjustment for the year ended December 31, 2021, and 2020, respectively was an immaterial amount.

Segment Reporting

The Company manages its operations as one segment, drug testing services. As a result, the financial information disclosed herein materially represents all of the financial information related to the Company's principal operating segment. See Note 13 – "Business Segment Reporting" for geographic breakdown of revenue.

2. Summary of Significant Accounting Policies (continued)

Recently Adopted Accounting Pronouncements

In December 2019, the FASB issued ASU 2019-12, "Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes". The amendments in this update simplify the accounting for income taxes by removing certain exceptions to the general principles in ASU Topic 740. The amendments also improve consistent application of and simplify U.S. GAAP for other areas of ASU Topic 740 by clarifying and amending existing guidance. The amendments in this update are effective for interim and annual periods for the Company beginning after December 15, 2020, with early adoption permitted. The Standard may be adopted using the prospective or retrospective transition approach and could be applied to a modified retrospective basis through a cumulative-effect adjustment to retained earnings as of the beginning of the fiscal year adoption. The Company adopted ASU 2019-12 as of January 1, 2021, with no material impact to the Company's consolidated financial statements.

3. Accounts Receivable

The Company maintains an allowance for uncollectible accounts receivable based on management's assessment of the collectability of its customer accounts by reviewing customer payment patterns and other relevant factors. The Company reviews the adequacy of the allowance for uncollectible accounts on a quarterly basis and adjusts the balance as determined necessary. Write-offs are recorded at the time a customer account is deemed uncollectable. The following is a rollforward of the Company's allowance for doubtful accounts (in thousands):

	As of December 31,			
		2021		2020
Balance, beginning of period	\$	37	\$	45
Provision for doubtful accounts		55		22
Write-offs		(3)		(30)
Balance, end of period	\$	89	\$	37

4. Accrued Expenses

Accrued expenses consist of the following (in thousands):

	As of December 31,			
		2021		2020
Accrued compensation and employee benefits	\$	507	\$	315
Accrued vacation expense		373		379
Accrued taxes		200		4
Accrued shipping expense		488		511
Accrued legal settlement		1,150		-
Other accrued expenses		470		592
Total Accrued Expenses	\$	3,188	\$	1,801

5. Income Taxes

The income tax provision consists of the following (in thousands):

	Year Ended December 31,					
		2021		2020		2019
Current –						
Federal	\$	131	\$	(2,006)	\$	1,478
State		84		(2)		54
Foreign		-		-		348
Total Current Deferred		215		(2,008)		1,880
Federal		(704)		(13)		(139)
State		333		(326)		(227)
Total Deferred		(371)		(339)		(366)
Income Tax Provision	\$	(156)	\$	(2,347)	\$	1,514

A reconciliation of the effective rate with the federal statutory rate is as follows:

	Year Ended December 31,					
_	2021	2020	2019			
Federal statutory rate	21.0 %	21.0%	21.0 %			
State income taxes, net of federal benefit	10.4 %	4.4 %	(4.5 %)			
Permanent differences	47.6 %	0.0%	(8.1 %)			
Stock based compensation	1.4 %	(0.4%)	1.3 %			
Federal R&D Credits	0.0%	1.6 %	(4.7 %)			
Foreign taxes, net of federal benefit	(10.9%)	(2.2%)	44.5 %			
Difference in tax rate for carryback claim	0.0%	13.4 %	0.0%			
Increase/(decrease) in valuation reserve	(50.5%)	0.0%	0.0%			
Effective tax rate	19.0 %	37.8 %	49.5 %			

The change in effective tax rate from 2020 to 2021 was primarily driven by the Company's 2020 carryback claim for the net loss as well as an increase to the valuation allowance in 2021 and a decrease in foreign taxes and federal tax credits in 2021, which were partially offset by the debt forgiveness and an increase in state taxes due to the CA research credits. As of December 31, 2021, the Company had \$0.3 million of federal net operating loss carryforwards which do not expire. As of December 31, 2021, the Company had \$2.6 million of state net operating loss carryforwards, of which \$2.4 million expire at various dates between 2030 and 2041, and \$0.2 million do not expire. As of December 31, 2021, the Company had \$0.1 million of federal tax credit carryforwards that expire in 2040 and there were \$1.2 million of California tax credit carryforwards relating to the years 2013 through 2021 which have an unlimited carryforward period. In 2021, the 10.4% state income tax effective rate primarily consisted of California research tax credits of 9.4%.

The components of the net deferred tax liabilities included in the accompanying balance sheets are as follows (in thousands):

	As of December 31,			
		2021		2020
Deferred Tax Assets				
Allowance for doubtful accounts	\$	21	\$	9
Accrued expenses		129		112
Stock-based compensation		325		265
R&D tax credits		1,083		1,005
Operating lease		944		1,130
PPP Loan expenses		-		9
NOL carryforward		219		97
Gross Deferred Tax Assets		2,721		2,627
Valuation Allowance		(414)		-
Deferred Tax Assets After Valuation Allowance		2,307		2,627
Deferred Tax Liabilities				
Excess of tax over book depreciation and amortization		(1,249)		(1,775)
Prepaid expenses		(61)		(48)
Operating lease		(837)		(1,015)
Gross Deferred Tax Liabilities		(2,147)		(2,838)
Net Deferred Tax Assets/(Liabilities)	\$	160	\$	(211)

5. Income Taxes (continued)

Income taxes are recorded in accordance with FASB ASC Topic 740, Income Taxes ("ASC 740"), which provides for deferred taxes using an asset and liability approach. The Company recognizes deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the financial statements or tax returns. Deferred tax assets and liabilities are determined based on the difference between the financial statement and tax bases of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse. A valuation allowance is provided, if, based upon the weight of available evidence, it is more likely than not that some or all of the net deferred tax assets will not be realized.

ASC 740 contains a two-step approach to recognizing and measuring uncertain tax positions (tax contingencies). The first step is to evaluate the tax position for recognition by determining if the weight of available evidence indicates it is more likely than not that the position will be sustained on an audit, including resolution of related appeals or litigation processes, if any. The second step is to measure the tax benefit as the largest amount which is more than 50% likely of being realized upon ultimate settlement. The Company considers many factors when evaluating and estimating the Company's tax positions and tax benefits, which may require periodic adjustments and which may not accurately forecast actual outcomes. The Company had immaterial uncertain tax positions at December 31, 2021, and 2020, respectively.

The Company operates within multiple taxing jurisdictions and could be subject to audit in these jurisdictions. These audits may involve complex issues, which may require an extended period of time to resolve. The Company has provided for its estimated taxes payable in the accompanying financial statements. The Company's policy is to recognize interest and penalties related to income tax matters as a general and administrative expense, when and if incurred. Interest and penalties for the years ended December 31, 2021, 2020 or 2019 were not material. In 2019, the I.R.S. completed a standard review of the Company's 2016 tax year. The tax years ended December 31, 2018, through December 31, 2021, remain subject to examination by all major taxing authorities.

6. Preferred Stock

The Board of Directors has the authority to designate authorized preferred shares in one or more series and to fix the relative rights and preferences without vote or action by the stockholders. The Board of Directors has no present plans to designate or issue any shares of preferred stock.

7. Stock-Based Awards

The 2006 Incentive Plan initially adopted in 2006 provides for grants of options with terms of up to ten years, grants of restricted stock or stock unit awards ("SUAs"), issuances of stock bonuses or grants other stock-based awards plus cash-based awards, to officers, directors, employees, and consultants. Such shares are issuable out of the Company's authorized but unissued common stock. In May 2021, the 2006 Incentive Plan was amended to increase the total number of shares issuable thereunder from 1.2 million to 1.6 million. As of December 31, 2021, 285 thousand shares remained available for future grant under the 2006 Incentive Plan.

The fair value of the SUAs is determined by the closing price on the date of grant. The fair value of options is determined using a Black-Scholes model. The SUAs and options vest over a period of two to four years and are convertible or exercisable into an equivalent number of shares of the Company's common stock provided that the employee receiving the award remains continuously employed throughout the vesting period. The Company records stock compensation expense related to the SUAs and options on a straight-line basis over the vesting term. Employees are issued shares upon vesting of SUAs, net of tax withholdings. As a result of our adoption of ASU 2016-09 in 2016, we recognize the impact of forfeitures when they occur with no adjustment for estimated forfeitures and recognize excess tax benefits as a reduction of income tax expense regardless of whether the benefit reduces income taxes payable.

7. Stock-Based Awards (continued)

On January 25, 2021, the Company granted SUAs covering 1.5 thousand shares of common stock. On March 16, 2021, the Company granted SUAs covering two thousand shares of common stock. On May 13, 2021, the Company granted SUAs covering 115.5 thousand shares of common stock. The SUAs vest over a period of two years for non-employee board members and four years for employees and are convertible into an equivalent number of shares of the Company's common stock provided that the director or employee receiving the award remains employed throughout the vesting period. The stock options become exercisable over two years for non-employee board members and four years for employees and have a term of 10 years. The Company records compensation expense related to the SUAs and options on a straight-line basis over the vesting term. Employees are issued shares upon vesting, in the case of SUA's or upon exercise of options, net of tax withholdings, unless the employee chooses to receive all shares and pay for the associated employment taxes. Upon the exercise of a stock option, the Company issues authorized but unissued shares and delivers them to the recipient. The Company does not expect to repurchase shares to satisfy stock option exercises. No other types of equity-based awards have been granted or issued under the 2006 Incentive Plan.

The following table represents all shares granted by the Company under the 2006 Incentive Plan for the last three years (shares in thousands):

Count Date	Т	C1	Fair Value
Grant Date	Туре	Shares	 Per Share (1)
May 13, 2021	SUA	116	\$ 6.55
March 16, 2021	SUA	2	\$ 7.04
January 25, 2021	SUA	2	\$ 5.54
December 16, 2020	SUA	5	\$ 4.71
November 11, 2020	Options	40	\$ 1.13
November 11, 2020	SUA	190	\$ 4.07
May 3, 2019	Options	192	\$ 2.99
May 3, 2019	SUA	18	\$ 10.60

(1) The fair value for the SUA's is the closing price of the Company's stock on that date. The fair value for options represents the fair value calculated using the Black-Scholes model. Options have contractual lives of 10 years. The options granted on May 3, 2019, have a fair value of \$2.99 per share based on the \$10.60 grant date and exercise prices and assuming 6.25 and 5.75 year estimated terms, 41% volatility, 2.4% interest rate and a 3.9% dividend yield rate. The options granted on November 11, 2020, have a fair value of \$1.13 per share based on the \$4.07 grant date and exercise prices and assuming 6.25 and 5.75 year estimated terms, 45% volatility, 0.9% interest rate and a 4.0% dividend yield rate. No options were granted during fiscal year ended December 31, 2021. For options granted during fiscal years ended December 31, 2020, and 2019, the weighted average grant date fair values were \$3.47, and \$3.40, respectively. For SUAs granted during fiscal years ended December 31, 2021, 2020 and 2019, the weighted average grant date fair values were \$6.55, \$4.89, and \$12.01, respectively.

A summary of the Company's stock option activity is as follows (in thousands, except price per share):

	Number of Shares	Weighted Average Exercise Price Per Share	Weighted Average Remaining Contractual Life (years)	Aggregate Intrinsic Value (2)
Outstanding, December 31, 2020	604	\$ 14.31	7.0	\$ -
Granted	-	\$ -		
Exercised	(1)	\$ 4.07		
Forfeited	(29)	\$ 3.47		
Outstanding, December 31, 2021	574	\$ 14.23	6.1	\$ 100
Exercisable, December 31, 2021	464	\$ 15.12	5.7	\$

(2) The aggregate intrinsic value on this table was calculated based on the amount, if any, by which the closing market price of the Company's stock on December 31 of the applicable year exceeded the exercise price of any of the underlying options, multiplied by the number of shares subject to each such option. The closing stock price as of December 31, 2021, and 2020 was \$7.02 and \$5.09, respectively.

7. Stock-Based Awards (continued)

A summary of the Company's stock unit award activity is as follows (in thousands, except price per share):

		Weighted Average			
	Number of	Grant-Date Fair Value			
	Shares		per Share (3)		
Outstanding & Unvested, December 31, 2020	166	\$	4.50		
Granted	119	\$	6.55		
Converted to common stock	(52)	\$	4.89		
Cancelled	(9)	\$	4.94		
Forfeited	-	\$	-		
Outstanding & Unvested, December 31, 2021	224	\$	5.48		

(3) Weighted average price per share is the weighted grant price based on the closing market price of each of the stock grants related to each transaction type. The weighted average fair value is the weighted average share price times the number of shares

The fair value of stock unit award vesting was \$296 thousand, \$274 thousand and \$223 thousand for the years ended December 31, 2021, 2020, and 2019, respectively. The intrinsic value of stock unit awards converted to common stock was based on the stock price on the vesting date and amounted to \$501 thousand, \$115 thousand and \$144 thousand for the years ended December 31, 2021, 2020, and 2019, respectively.

As of December 31, 2021, a total of 844 thousand shares of common stock were reserved for issuance under 2006 Incentive Plan. As of December 31, 2021, the unamortized fair value of outstanding options and awards was \$1.2 million to be amortized over a weighted average period of 2.9 years.

8. Employee Benefit Plan

The Psychemedics Corporation 401(k) Savings and Retirement Plan (the "401(k) Plan") is a qualified defined contribution plan in accordance with Section 401(k) of the Internal Revenue Code. All employees over the age of 21 are eligible to make pre-tax contributions up to a specified percentage of their compensation. Under the 401(k) Plan, the Company may, but is not obligated to, match a portion of the employees' contributions up to a defined maximum. Matching contributions of zero, \$198 thousand and \$262 thousand were made in the years ended December 31, 2021, 2020 and 2019, respectively.

9. Commitments and Contingencies

Commitments

The Company leases certain of its facilities and equipment under operating lease agreements expiring on various dates through December 2026. Total minimum lease payments, including scheduled increases, are charged to operations on the straight-line basis over the life of the respective lease. Rent expense was \$1.1 million, \$1.1 million and \$1.2 million in 2021, 2020 and 2019, respectively. See Note 10 – "Operating Leases" for commitments remaining under lease agreements.

Contingencies

In the normal course of business, we are subject to contingencies, such as legal proceedings and claims arising out of our business, that cover a wide range of matters, including, among others, government investigations, shareholder lawsuits, product liability, contractual claims and tax matters. We recognize accruals for such contingencies when it is probable that a liability will be incurred and the amount of the loss can be reasonably estimated. These estimates are subject to uncertainties that are difficult to predict and, as such, actual results could vary from these estimates.

Settlements

On September 23, 2021, the Company entered into a settlement agreement to resolve a contract dispute regarding the Company's alleged contractual obligations to a customer involved in litigation with certain of the customer's former employees regarding their employment termination (the "September 2021 Settlement Agreement"). The Company was not a party to any of these wrongful termination claims and the customer was in control of defending each claim. Pursuant to the September 2021 Settlement Agreement, the Company

agreed to pay the customer an aggregate of \$1.9 million in addition to \$0.2 million that will be paid by the Company's insurers, in full settlement and release of the dispute. The September 2021 Settlement Agreement includes other customary terms and includes confidentiality provisions between the parties. Neither party has admitted any liability or fault by entering into the September 2021 Settlement Agreement. The Company previously declined to continue its contractual relationship with the customer. The Company funded its payment obligation in full under the September 2021 Settlement Agreement through existing cash on hand. There was no liability reserve in connection with the September 2021 Settlement Agreement as of December 31, 2021.

On December 6, 2021, the Company entered into a binding Memorandum of Understanding (the "MOU") to settle a purported class action lawsuit against it related to certain California wage and hour laws. The lawsuit, Enma Sagastume v. Psychemedics Corporation, Case No. 2:20-CV-06624-DSF, is pending in the United States District Court for the Central District of California (the "California Lawsuit") and is similar to numerous lawsuits filed against employers with operations in California.

In the binding MOU, the parties agreed to settle this matter for a payment by the Company of \$1.2 million in exchange for the dismissal of the California Lawsuit and a customary release of liability, subject only to final court approval and the process described below. Factoring in that process, the Company estimates that the settlement funds will be dispersed in the second half of 2022, subject to the actual timing of final court approval.

Although the Company believes that the allegations in the California Lawsuit lack merit, it agreed at a mediation to enter into the binding MOU to settle the claims in the California Lawsuit in order to avoid potentially significant legal fees, other expenses, and management time that would have to be devoted to protracted litigation in California regarding its wage and hour laws. The foregoing was also impacted in part by new California case law in February 2021 regarding meal period compliance. The allegations in the California Lawsuit relate to alleged discrepancies in compliance with meal and rest periods required by California law and other alleged compliance discrepancies relating to the California wage and hour laws with respect to non-exempt hourly employees of the Company in California for a period since June 9, 2017. The California Lawsuit sought recovery of wages, penalties, interest, attorneys' fees and other alleged damages. As part of the settlement, the Company continues to deny any liability or wrongdoing with respect to the claims made in the California Lawsuit.

The MOU assumes class certification for purposes of the settlement only. The settlement amount of \$1.2 million, which includes plaintiff attorneys' fees and costs, is subject to potential increase based on any adjustments in the final class size and the exact period to be covered, as determined by the court's final approval. However, the Company believes that such adjustments, if any, would likely be immaterial. Once court approved, in exchange for the settlement payment, the plaintiff and all class members who do not opt out of the settlement will provide a broad release of any liability relating to the subject matter of the California Lawsuit, including any claims of such persons under California's Private Attorneys' General Act of 2004. Such release is for the benefit of the Company, its affiliates, and any successor to the Company. The Company has the right to revoke the settlement prior to court approval in the event opt-outs, if any, from the class membership exceed a specified level. While the settlement is subject to final court approval as is customary, the MOU expressly provides that it is binding on and enforceable by each of the parties thereto, including by any successor to the Company. There is a \$1.2 million liability reserve in connection with the California Lawsuit as of December 31, 2021.

10. Operating Leases

The Company has five operating leases for office and laboratory space used to conduct business. The exercise of lease renewal options is at our discretion and there are no renewals to extend the lease terms included in our Right-Of-Use ("ROU") assets and lease liabilities as they are not reasonably certain of exercise. The Company regularly evaluates the renewal options and when they are reasonably certain of exercise. As most of the Company's leases do not provide an implicit rate, the Company uses the incremental borrowing rate based on the information available at the lease commencement date in determining the net present value (NPV) of the lease payments.

The weighted average discount rate used for leases as of December 31, 2021 is 3.9%. The weighted average lease term as of December 31, 2021, is 4.0 years. The operating lease expense for the twelve months ended December 31, 2021, and 2020, was \$1.1 million and \$1.1 million, respectively.

Maturities and balance sheet presentation of the Company's lease liabilities for all operating leases as of December 31, 2021, is as follows (in thousands):

2022	\$ 1,117
2023	1,118
2024	1,034
2025	592
2026	460
Total lease payments	4,321
Less interest:	(457)
Present value of lease liabilities	\$ 3,864
Current operating lease liabilities	\$ 984
Long-term operating lease liabilities	2,880
Total	\$ 3,864

11. Debt and Other Financing Arrangements

On March 20, 2014, the Company entered into an equipment financing arrangement with Banc of America Leasing & Capital, LLC (the "Lender"), which it amended on various dates, most recently on March 23, 2021, including a Master Loan and Security Agreement and related documentation (collectively the "Equipment Loan Arrangement") which provided the Company with the ability to finance, at its option, up to \$16 million of new and used equipment purchases. Each such purchase financed under the Equipment Loan Arrangement was documented by the execution of an equipment note with a maturity date of 60 months from the applicable loan date. The loans bore interest at the then current 30-day LIBOR rate plus a premium ranging from 1.75% to 3.79%. Principal and interest were payable over the 60-month repayment period. Borrowings under the Equipment Loan Arrangement were secured by a first priority security interest in the equipment acquired with the proceeds of the equipment notes. Under the Equipment Loan Arrangement, the Company has been subject to a maximum quarterly funded debt to EBITDA ratio and a minimum fixed charge coverage ratio each of which was waived for certain quarters in 2020 and 2021. The Company was in compliance with all covenants under the Equipment Loan Arrangement as of December 31, 2021.

Under the Equipment Loan Arrangement, the Company executed notes on various dates between March 24, 2014, and December 4, 2019 in the aggregate amount of \$12.2 million, of which \$0.7 million and \$0.7 million was repaid in 2021 and 2020, respectively. As of December 31, 2021, the aggregate amount outstanding under the equipment notes was \$1.3 million. The weighted average interest rate for these notes for the year ended December 31, 2021, was 3.5% and represented \$49 thousand of interest expense. As of December 31, 2021, weighted average interest rate was 3.2%.

On May 1, 2020, the Company entered into a term loan with Bank of America N.A. under the PPP administered by the United States Small Business Administration ("SBA") under the CARES Act (the "PPP Loan"). The principal amount of the PPP Loan was \$2.1 million, which was evidenced by a promissory note with a maturity date of May 4, 2022. The note bore interest on the unpaid balance at the rate of one percent (1%) per annum.

In July 2021, the PPP Loan was 100% forgiven by the SBA. The forgiveness of the PPP Loan was recorded in the Company's third fiscal quarter of the 2021, by eliminating the PPP Loan from the consolidated balance sheet with corresponding gains in income.

The annual principal repayment requirements for debt obligations as of December 31, 2021, are as follows (in thousands):

2022	664
2023	294
2024	305
Long-term debt from equipment financing	1,263
Less current portion of long-term debt from equipment financing	(664)
Long-term debt from equipment financing, net of current portion	\$ 599

12. Other Expense

Other expense consists primarily of interest expense related to the Company's equipment financing arrangement. Interest expense for the year ended December 31, 2021, 2020, and 2019 was \$49 thousand, \$75 thousand, and \$59 thousand, respectively. There was no interest income for the years ended December 31, 2021, and 2020. Interest income for the year ended December 31, 2019, was \$134 thousand.

13. Business Segment Reporting

The Company manages its operations as one segment, drug testing services. As a result, the financial information disclosed herein materially represents all the financial information related to the Company's principal operating segment. All Brazil sales were though one independent distributor. The Company's revenues by geographic region, based on the location of the customer, were as follows (in thousands):

	Year Ended December 31,						
		2021		2020		2019	
Consolidated Revenue:							
United States	\$	23,584	\$	19,486	\$	27,329	
Brazil		640		1,344		9,819	
Other		685		530		530	
Total Revenue	\$	24,909	\$	21,360	\$	37,678	

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

a) Evaluation of Disclosure Controls and Procedures

The Company carried out an evaluation as of December 31, 2021, under the supervision and with the participation of our management, including our Chief Executive Officer and Vice President, Controller as well as a third-party internal control firm, of the effectiveness of the design and operation of our disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act. Based upon that evaluation, our Chief Executive Officer and Vice President, Controller have concluded that our disclosure controls and procedures were effective as of December 31, 2021, to ensure that information required to be disclosed in the reports that the Company files or submits under the Exchange Act is (i) recorded, processed, summarized and reported, within the time periods specified in the Securities and Exchange Commission's rules and forms and (ii) accumulated and communicated to our management, including our Chief Executive Officer and Vice President, Controller, as appropriate to allow timely decisions regarding required disclosure.

b) Management's Report on Internal Control over Financial Reporting

The Company's management is responsible for establishing and maintaining an adequate system of internal control over financial reporting, as defined in Exchange Act Rule 13a-15(f) and 15d-15(f). The Company's internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Therefore, even those systems determined to be effective can provide only reasonable assurance, as opposed to absolute assurance, of achieving their internal control objectives.

Management, including our Chief Executive Officer and Vice President, Controller, conducted an assessment of the Company's internal control over financial reporting as of December 31, 2021, based on criteria established in the 2013 Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on the assessment, management concluded that, as of December 31, 2021, the Company's internal control over financial reporting is effective.

c) Changes in Internal Control over Financial Reporting

There was no change the Company's internal control over financial reporting during the Company's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

Item 9B. Other Information

On March 29, 2022, the Board established August 12, 2022, as the scheduled date of the Company's 2022 annual meeting of stockholders (the "2022 Annual Meeting"). The-Company will publish additional details regarding the 2022 Annual Meeting, including its record date and the exact time, location and matters to be voted on at the 2022 Annual Meeting, in the Company's proxy statement for the 2022 Annual Meeting when it is filed, which the Company currently expects will be in late June. Because the scheduled date of the 2022 Annual Meeting represents a change of more than 60 calendar days from the anniversary date of the Company's 2021 annual meeting of stockholders, the deadlines for stockholders to submit proposals and nominations of directors for the 2022 Annual Meeting have been adjusted pursuant to the Company's Amended and Restated Bylaws (the "Bylaws") and applicable law.

Advance Notice Deadline. Under the Bylaws, in order for director nominations or other business to be presented at the 2022 Annual Meeting, written notice must be delivered to the Company's Secretary no earlier than April 14, 2022, and no later than the close of business on May 14, 2022. Such notice must comply with the procedural and content requirements of the Bylaws.

Rule 14a-8 Proposals Deadline. Stockholder proposals intended for inclusion in the Company's definitive proxy statement for the 2022 Annual Meeting pursuant to Rule 14a-8 under the Exchange Act must be received at the Company's principal executive office not later than a reasonable time before it begins to print and send its proxy materials.

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections

Not applicable.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

Following is a list that sets forth the names, ages and positions within the Company of all of the Executive Officers of the Company and the Directors of the Company, as well as Directors nominated or chosen to become directors, in each case, as of March 30, 2022.

Name	Age	Position
Raymond C. Kubacki	77	Chairman, Chief Executive Officer, President, Director
Charles Doucot	56	Executive Vice President
Andrew Limbek	36	Vice President, Controller
Michael I. Schaffer, Ph.D	77	Vice President, Laboratory Operations
Harry Connick*	96	Director, Audit Committee Member, Compensation Committee Member, Nominating Committee Member
Walter S. Tomenson, Jr	75	Director, Audit Committee Member, Compensation Committee Member, Nominating Committee Member
Robyn C. Davis	60	Director, Audit Committee Member, Compensation Committee Member, Nominating Committee Member
Fred J. Weinert	74	Director, Audit Committee Member, Compensation Committee Member, Nominating Committee Member, Brazil Oversight Committee Member, Lead Independent Director
Andrew Reynolds**	54	Director, Audit Committee Member, Compensation Committee Member, Nominating Committee Member

^{*}retiring as a director as of April 4, 2022.

^{**}elected to the Board effective April 4, 2022.

All Directors hold office until the next annual meeting of stockholders or until their successors are elected. Officers serve at the discretion of the Board of Directors.

Mr. Kubacki has been the Company's President and Chief Executive Officer since 1991. He has also served as Chairman of the Board of the Company since 2003. From March 2011 until June 2017, he served as a director of Integrated Environmental Technologies, Ltd. From 2007 until 2010, he served as a director of Protection One, Inc. and from 2004 to 2007 he served as a director of Integrated Alarm Services Group, Inc. He is also a trustee of the Center for Excellence in Education based in Washington, D.C. and holds an Executive Masters Professional Director Certification, their highest-level award, from the American College of Corporate Directors, a public company director education and credentialing organization. Mr. Kubacki has been a director of the Company since 1991.

Mr. Doucot has served as Executive Vice President since January 2019. From May 2018 until January 2019, he served as Vice President Sales & Marketing. Prior to joining the Company, he served as Vice President Sales & GM of Burning Glass Technologies, a data analytics company, from January 2016 to December 2017. From April 2014 to January 2016, he served as Sr. VP and GM at Lumesse, an HR technology company, responsible for the Americas Business and starting a new business unit. From August 2009 to February 2014, he served as VP WW Sales and Marketing for Kalido, a big data and analytics company. Mr. Doucot began his career spending over 15 years at Hewlett-Packard Company with increasing levels of global responsibility.

Mr. Limbek has served as Vice President, Controller since January 2021. From March 2019 until January 2021, he served as an accounting consultant at Applied Genetic Technologies Corporation, a publicly-held clinical stage biotechnology company, where he served as interim Financial Planning & Analysis Director and reported directly to the Chief Financial Officer of the company. From June 2019 until March 2020, he served as Controller at Racepoint Global, Inc., an international independent professional services agency. From January 2018 until June 2019, Mr. Limbek served as Assistant Controller of Racepoint Global, Inc. From March 2017 until January 2018, Mr. Limbek served as a Senior Accounting Manager at Oxford Global Resources, LLC, a temporary staffing firm. From 2014 until February 2017, he served as a Senior Manager at Bullpen Financial LLC, a financial services firm. Mr. Limbek is a Certified Public Accountant in the Commonwealth of Massachusetts.

Dr. Schaffer has served as Vice President of Laboratory Operations since 1999. From December 2016 – December 2020, Dr. Schaffer served as a member of the Drug Testing Advisory Board (DTAB) which advises the administrator of Substance Abuse and Mental Health Services Administration (SAMHSA) on drug testing activities and laboratory certification. From 1990 to 1999, Dr. Schaffer served as Director of Toxicology, Technical Manager and Responsible Person for the Leesburg, Florida laboratory of SmithKline Beecham Clinical Laboratories. From 1990 to 1999, Dr. Schaffer was also a member of the Board of Directors of the American Board of Forensic Toxicologists. Dr. Schaffer has also served as an inspector for the College of American Pathologists since 1990.

Mr. Connick served as District Attorney for Orleans Parish (New Orleans, LA) from 1974 to 2003. In 2002, Mr. Connick received from Drug Czar, John P. Walters, the Director's Award for Distinguished Service, in recognition of exemplary accomplishment and distinguished service in the fight against illegal drugs. Mr. Connick has been a director of the Company since 2003. On March 18, 2022, Mr. Connick announced that he was retiring from the Board effective April 4, 2022.

Mr. Tomenson was a senior advisor to Integro Ltd., having retired in 2011. Mr. Tomenson was Managing Director and Chairman of Client Development of Marsh, Inc. from 1998 until 2004. From 1983 to 1998 he was Chairman of FINPRO, the financial/professional services division of Marsh, Inc. Mr. Tomenson is a Trustee of Trinity College School Fund, Inc. He also serves on the Executive Council of Inner-City Scholarship Fund. He is a board member and Vice-Chairman of the Achievement Centers for Children and Families (Delray Beach, FL). Mr. Tomenson holds an Executive Masters Professional Director Certification, their highest-level award, from the American College of Corporate Directors, a public company director education and credentialing organization. Mr. Tomenson has been a director of the Company since 1999.

Ms. Davis has been managing director of Angel Healthcare Investors, LLC, an early-stage investment group focused on medical devices, life sciences and specialty pharmaceutical companies since 2000. Prior to Angel Healthcare, Ms. Davis was a director of the merchant banking services practices for Barents Group, LLC, and a strategy consultant at Bain & Company. She serves as a director of Azenta Inc. a provider of life sciences solutions, and Akston Bioscience, an early-stage company developing an insulin engineering platform for multiple conditions. Ms. Davis holds an Executive Masters Professional Director Certification from the American College of Corporate Directors. Ms. Davis was elected as a director of the Company on March 16, 2021.

Mr. Weinert is an entrepreneur whose current activities are concentrated in commercial real estate, international business development and environmental consulting. He served on the Business Advisory Council for the University of Dayton from 1984 until 2005. From 1973 until 1989, Mr. Weinert held various executive positions in the Finance and Operations groups of Waste Management, Inc. and its subsidiaries, including 6 years as the President of Waste Management International, Inc. Mr. Weinert has been a director of the Company since 1991.

Mr. Reynolds serves as an independent director for AddSecure, a Stockholm, Sweden based provider of Internet of Things (IoT) solutions including security, surveillance, and safety communication systems; Idle Smart, an early-stage provider of idle and battery power management solutions for large transport vehicles; and Linxup (formally known as Agilis Systems), a SaaS-based provider of trucking fleet telematics and tracking solutions. Mr. Reynolds also serves as an advisor to Locomation, an autonomous trucking company providing aftermarket solutions for large commercial transport vehicles. From June 2011 until December 2017, Mr. Reynolds served as Senior Vice President of Global Business Development at Fleetmatics, PLC, of Dublin, Ireland (FLTX), a provider of truck fleet tracking and mobile workforce management software. From July 2007 until January 2011, Mr. Reynolds served as Senior Vice President of Corporate Development at Art Technology Group (ARTG), an ecommerce software provider. From September 2002 until June 2007, Mr. Reynolds served as Vice President of Corporate Development for Hyperion Solutions (HYSL), a financial and analytics software applications company.

Our Common Stock is listed on the NASDAQ Stock Market LLC, or Nasdaq, and Nasdaq's listing standards relating to director independence apply to us. The Board of Directors has determined that the following current directors are independent under applicable Nasdaq listing standards: Messrs. Weinert, Connick and Tomenson, as well as Ms. Davis.

The Company strives to have the members of its Board of Directors possess a diverse set of skills and background so as to best provide guidance to the management team and oversight to the Company. While the Nominating Committee does not have a formal policy in this regard, the Nominating Committee views diversity broadly to include a diversity of experience, skills and viewpoint, as well as diversity of gender and race. The Nominating Committee does not assign specific weights to particular criteria and no particular criterion is necessarily applicable to all prospective nominees. Skills sought include financial, capital markets, executive leadership, sales and marketing, domestic and international business development and strategic planning.

The Company recognizes that different board leadership structures may be appropriate for companies in different situations and believe that no one structure is suitable for all companies. We believe our current board leadership structure is optimal for us because it demonstrates to our employees, suppliers, customers, and other stakeholders that we are under strong leadership, with a single person setting the tone and having primary responsibility for managing our operations. A single leader for both the Company and the Board of Directors eliminates the potential for confusion or duplication of efforts and provides us with clear leadership.

Because the positions of Chairman of the Board and Chief Executive Officer are held by the same person, the Board also believes it is appropriate for the independent directors to elect one independent director to serve as a Lead Independent Director. In addition to presiding at executive sessions of independent directors, the Lead Independent Director has the responsibility to: (1) coordinate with the Chairman of the Board and Chief Executive Officer in establishing the agenda and topic items for Board meetings; (2) retain independent advisors on behalf of the Board as the Board may determine is necessary or appropriate; and (3) perform such other functions as the independent directors may designate from time to time. Mr. Weinert currently serves as the Lead Independent Director, a position he has held since March 2021.

Our overall leadership structure consists of a single individual serving as Chief Executive Officer and Chairman of the Board, with independent and experienced directors making up the majority of our Board and independent oversight provided by our Lead Independent Director. We believe that this structure is beneficial to us and our stockholders.

The Company has a code of ethics that applies to all employees and non-employee directors. This code satisfies the requirements set forth in Item 406 of Regulation S-K and applies to all relevant persons set forth therein. The Company will mail to interested parties a copy of the Code of Ethics upon written request and without charge. Such request shall be made to our General Counsel, 289 Great Road, Acton, Massachusetts 01720.

The Audit Committee, whose members are Ms. Davis and Messrs. Connick, Tomenson and Weinert, reviews the appropriateness, quality and acceptability of the Company's accounting policies and the integrity of financial statements reported to the public, and compliance with legal and regulatory requirements. The Board has determined that each member of the Audit Committee is an "independent director" under the rules of the Nasdaq Stock Market governing the qualifications of the members of audit committees, and each member of the Audit Committee satisfies the requirements of the Nasdaq Stock Market regarding competency in financial matters. In addition, the Board of Directors has determined that Mr. Weinert, the Chairman of the Audit Committee, qualifies as an "Audit Committee Financial Expert" as defined by the Securities and Exchange Commission rules.

Item 11. Executive Compensation

Director Compensation

Mr. Kubacki receives no additional compensation for serving on the Company's Board of Directors. Each of the Company's outside (non-employee) directors received cash compensation of \$12,500 per quarter served in 2021. In addition, Mr. Weinert received additional cash compensation of \$15,000 in 2021 for serving as Chairman of the Audit Committee, and \$65,000 for serving as Lead Independent Director and as the Board's corporate governance representative overseeing the Corporation's activities in Brazil. For 2022, Mr. Weinert's compensation for serving in these latter two roles was reduced to \$48,000. Each of the outside directors has also been granted from time to time equity awards under the Company's equity compensation plans, most recently in May 2021. In each case the directors were granted stock unit awards or non-qualified stock options with an equivalent fair value, that in each case vest with respect to 50% of the number of shares covered thereunder on approximately the first anniversary of the date of grant, and with respect to the balance of 50% of the shares on approximately the second anniversary of the date of grant. Any unvested stock unit awards or options generally terminate upon the cessation of a recipient's service as a member of the Board of Directors, subject to partial or full vesting in the case of termination on account of death or permanent disability. In the event of a change in control of the Company (as defined in the stock unit award or option agreement evidencing the award) the stock unit awards or options become fully vested immediately prior to the effective date of such change in control.

The following table shows, for the fiscal year ended December 31, 2021, the compensation paid by the Company or accrued for such year, to the Company's non-employee directors. The compensation paid to Mr. Kubacki for his service as Chairman, Chief Executive Officer and President, is reported in the Summary Compensation Table under the caption "Executive Compensation" below.

Director Compensation	ı For Fisca	l Year Ended	December 31.	2021

(a)	(b)	(c)	(d)	(e)	(f)
	Fees Earned				
	or	Stock	Option	All other	
Name	Paid in Cash	Awards (1)	Awards (1)	Compensation (4)	Total
Robyn Davis	\$ 37,500	\$ 86,130 (2)	\$ -(3)	-	\$ 123,630
Harry Connick	\$ 50,000	\$ 72,050 (2)	\$ -(3)	-	\$ 122,050
Walter Tomenson, Jr.	\$ 50,000	\$ 72,050 (2)	\$ -(3)	-	\$ 122,050
Fred J. Weinert	\$ 130,000	\$ 72,050 (2)	\$ -(3)	-	\$ 202,050

- (1) The amounts in columns (c) and (d) reflect the grant date fair values of awards to the named individuals in 2021.
- (2) As of December 31, 2021, the number of shares underlying unvested stock unit awards held by the non-employee directors was as follows: Mr. Connick: 21,000, of which 5,500 vest on April 30, 2022, 10,000 vest on November 11, 2022, and the balance vest on April 30, 2023; Mr. Tomenson: 21,000, of which 5,500 vest on April 30, 2022, 10,000 vest on November 11, 2022, and the balance vest on April 30, 2023; Mr. Weinert: 21,000, of which 5,500 vest on April 30, 2022, 10,000 vest on November 11, 2022, and the balance vest on April 30, 2023; and Ms. Davis: 13,000, of which 1,000 shares vested on March 16, 2022, 5,500 vest on April 30, 2022, 1,000 vest on March 16, 2023, and the balance vest on April 30, 2022.
- (3) As of December 31, 2021, the number of shares underlying non-qualified stock options held by the non-employee directors was as follows: Mr. Connick: 2,000, of which options to acquire 1,000 shares were then exercisable and options to acquire 1,000 shares are exercisable on November 11, 2022; Mr. Tomenson: 64,500, of which options to acquire 63,000 were then exercisable, and options to acquire 1,000 shares are exercisable on November 11, 2022; and Mr. Weinert: : 82,500, of which options to acquire 81,500 were then exercisable, and options to acquire 1,000 shares are exercisable on November 11, 2022.
- (4) Any perquisites or other personal benefits received from the Company by the named director were less than the reporting thresholds established by the Securities and Exchange Commission (\$10,000).

EXECUTIVE COMPENSATION

Overview of Compensation Program

The Compensation Committee of the Board has responsibility for establishing, implementing and continually monitoring adherence to the Company's compensation philosophy. The Compensation Committee ensures that the total compensation paid to the executive officers is fair, reasonable and competitive.

Throughout this annual report the individual who served as the Company's Chief Executive Officer during fiscal 2021, as well as those individuals who were the Company's two most highly compensated executive officers other than the Chief Executive Officer are included in the Summary Compensation Table below and are referred to as the "named executive officers".

Compensation Philosophy and Objectives

The Compensation Committee believes that the most effective executive compensation program is one that is designed to reward the achievement of specific annual performance goals by the Company, and which aligns executives' interests with those of the stockholders by rewarding performance with the ultimate objective of improving stockholder value. The Compensation Committee evaluates both performance and compensation to ensure that the Company maintains its ability to attract and retain superior employees in key positions and that compensation provided to key employees remains competitive relative to the compensation paid to similarly situated executives of similarly sized public companies. To that end, the Compensation Committee believes executive compensation packages provided by the Company to its executives, including the named executive officers, should include both cash and stock-based compensation and that its executives' performance should be rewarded as measured against established goals.

Role of Executive Officers in Compensation Decisions

The Compensation Committee makes all compensation decisions for the Chief Executive Officer but takes into account his recommendations when making compensation decisions with respect to the other executive officers.

The Chief Executive Officer annually reviews the performance of each other executive officer. The conclusions reached and recommendations based on these reviews, including with respect to salary adjustments and annual award amounts, are presented to the Compensation Committee. The Compensation Committee can exercise its discretion in modifying any recommended adjustments or awards to executives.

Setting Executive Compensation

Based on the foregoing objectives, the Compensation Committee has structured the Company's annual and long-term incentive-based cash and non-cash executive compensation to motivate executives to achieve the business goals set by the Company and reward the executives for achieving such goals.

In making compensation decisions, the Compensation Committee compares each element of total compensation against what the Compensation Committee believes to be the average amount paid to similarly situated executives at comparably sized publicly-traded and privately-held companies.

A significant percentage of total compensation is allocated to incentives as a result of the philosophy mentioned above. The Compensation Committee determines the appropriate level and mix of incentive compensation. Income from such incentive compensation is realized as a result of the performance of the Company or the individual, depending on the type of award, compared to established goals. A significant portion of its total compensation payable to executive officers is in the form of cash bonus awards tied to achievement of performance goals and to the award of restricted stock units or stock options that would become vested over a period of time.

2021 Executive Compensation Components

For the fiscal year ended December 31, 2021, the principal components of compensation for named executive officers were:

- base salary
- performance-based cash incentive compensation; and
- long-term equity incentive compensation

Base Salary

Base salary ranges for named executive officers are determined by the Compensation Committee for each executive based on his or her position and responsibility, a market competitive assessment of similar roles at other companies and a comparison of salaries paid to peers within the Company. Salary levels are typically considered annually as part of the Company's performance review process as well as upon a promotion or other change in job responsibility. Merit based increases to salaries of executive officers are based on the Compensation Committee's assessment of the individual's performance.

On February 1, 2021, at the request of the Chief Executive Officer, each of the executive officers who were also executive officers in 2020 took an additional base salary cut of 10% of his or her current base salary in order to curtail costs. The cuts remained in place throughout the remainder of 2021 and are reflected in the Summary Compensation Table below. These cuts followed a previous 10% base salary reduction made during the third quarter of 2020 for executive officers.

Incentive Cash Bonus Compensation

The Company typically provides its named executive officers with the opportunity to earn cash incentive bonuses. For most years, bonuses are determined based on a combination of qualitative and quantitative, company and individual measures, the details of which are established annually in the form of business objectives. The business objectives may vary for each executive based upon his or her responsibilities and may include financial and/or strategic measures. The Compensation Committee typically retains the discretion to amend the bonus program including the ability to increase or decrease any bonus payment and make changes to any financial and/or strategic measures. In 2021, the named executive officers' bonuses were computed as follows: (i) up to seven and one-half percent (7.5%) of base salary would be payable if the Company achieved pre-determined revenue targets; (ii) up to an additional seven and one-half percent (7.5%) of base salary would be payable if the Company achieved pre-determined earnings per share targets; and (iii) up to an additional ten percent (10%) of base salary would be payable based on achievement of individual written performance objectives for the fiscal year, as determined by Mr. Kubacki (for named executive officers other than himself) and as determined by the Compensation Committee (with respect to achievement by Mr. Kubacki of his performance objectives). The Compensation Committee retained sole discretion over all matters relating to the annual bonus payments, including, without limitation, the decision to pay any bonuses, the amount of each bonus, if any, the ability to increase or decrease any bonus payment and make changes to any financial and/or strategic measures.

Long-Term Equity Incentive Compensation

It is the philosophy of the Company to provide executives with incentives to receive equity in the Company and, thus, align their financial interests with those of the Company's shareholders. The Company's 2006 Incentive Plan provides long-term rewards and incentives to the Company's named executive officers, as well as other participants.

Stock Unit Awards.

Stock unit awards ("Awards") represent a right to receive shares of the Company's Common Stock in varying amounts subject to satisfaction of certain time-based vesting requirements. The amount of stock unit awards granted to the named executive officers typically varies based upon their levels of responsibility, their individual performance and the Company's performance for the year preceding the year of grant. Each of the units provides for vesting over the four-year period following the date of grant and are convertible into shares of Common Stock of the Company upon vesting.

Stock Options.

Stock options ("Option Awards") represent a right to acquire shares of the Company's Common Stock in varying amounts at a strike price equal to the closing price on the date of grant, subject to satisfaction of certain time-based vesting requirements. The number of Option Awards granted to the executive officers typically varies based upon their levels of responsibility and their individual performance. Each of the Option Awards provides for vesting over the four-year period following the date of grant.

Retirement and Other Benefits

The Company maintains a 401(k) plan for the benefit of all employees who have satisfied minimum age requirements. Employees have the opportunity to contribute to the plan on a before tax basis, subject to limits prescribed under the Internal Revenue Code. All employee contributions and any Company matching contributions are 100% vested on the date of contribution. The Company does not maintain any separate non-qualified retirement plans.

Perquisites and Other Personal Benefits

Any perquisites or other personal benefits that the Company offers to its executive officers are below the threshold limit (\$10,000 per executive, per annum) for reporting under SEC rules.

The Company has entered into Change of Control Severance Agreements with Messrs. Kubacki, Doucot and Schaffer. The Change of Control Severance Agreements are designed to promote stability and continuity of senior management. Information regarding applicable payments under such agreements for Messrs. Kubacki, Doucot and Schaffer is provided under the heading "Potential Payments upon Termination and Change in Control" below.

Tax and Accounting Implications

As part of its role, the Compensation Committee reviews and considers the deductibility of executive compensation under Section 162(m) of the Internal Revenue Code, which provides that the Company may not deduct compensation of more than \$1,000,000 per year to named executive officers except, in the case of equity awards granted prior to 2018, to the extent they constituted performance-based compensation. Depending on future stock prices, it is possible that a portion of the payments that might be payable to Mr. Kubacki under the agreement with him described under the heading "Potential Payments upon Termination and Change in Control" below may not be fully deductible. Subject to the foregoing, the Company believes that all compensation paid to its executive officers is, or will be when paid, fully deductible for federal income tax purposes.

Summary of Cash and Certain Other Compensation

The following tables show, for the fiscal years ended December 31, 2021, and 2020, the total compensation earned by the named executive officers during the year ended December 31, 2021, and outstanding equity awards held by the named executive officers as of December 31, 2021.

Summary Compensation Table

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
							Change in		
							Pension Value		
							and		
					0	Non-Equity	Nonqualified	411.0.1	
3.7 1				Gr. 1	Option	Incentive Plan	Deferred	All Other	
Name and Position	Year	Salary	Bonus (1)	Stock Awards	Awards (2)	Compensation (3)	Compensation Earnings	Compensation (4)	Total
-	1 Cai	Salary	Dollus	Awaius		. ,	Lamings	` '	Total
Raymond C. Kubacki	2021	\$ 430,702	\$ 42,500	\$ 150,650	\$ -	\$ -	\$ -	\$ -	\$ 623,852
Chairman,	LOZI	Ψ 130,702	Ψ 12,500	Ψ 130,030	Ψ	Ψ	Ψ	Ψ	Ψ 023,032
CEO, &									
President	2020	\$ 509,654	\$ -	\$ 142,450	\$ 16,951	\$ -	\$ -	\$ 16,146	\$ 685,201
Charles									
Doucot	2021	\$ 238,750	\$ 24,000	\$ 78,600	\$ -	\$ -	\$ -	\$ -	\$ 341,350
Executive									
Vice									
President	2020	\$ 313,692	\$ -	\$ 73,260	\$ 7,910	\$ -	\$ -	\$ 2,831	\$ 397,693
Michael I.									
Schaffer	2021	\$ 236,024	\$ 12,000	\$ 29,475	\$ -	\$ -	\$ -	\$ -	\$ 277,499
Vice									
President									
Labortory	2020	¢ 274 100	¢.	e 20.400	e 2260	¢.	¢.	e 0.524	e 212 454
Operations	2020	\$ 274,180	\$ -	\$ 28,490	\$ 2,260	\$ -	\$ -	\$ 8,524	\$ 313,454

- (1) The amounts in column (d) reflect cash bonus awards made to the executive officers based on achievement of certain financial and individual objectives, as described in more detail below under the heading "Incentive Cash Bonus Compensation".
- (2) The amounts in column (f) reflect the grant date fair value of the awards with respect to stock options granted in the applicable year, measured in accordance with FASB ASC Topic 718. Amounts shown do not reflect compensation actually received by the named executive officer nor does it necessarily reflect the actual value that will be recognized by the named executive officer. The assumptions used to calculate the value of option awards are set forth under Note 7 "Stock-Based Awards".
- (3) The amount in column (g) represents commissions paid to the named executive officer.
- (4) The amounts shown in column (i) reflect for each named executive officer matching contributions allocated by the Company to each of the named executive officers during the applicable year pursuant to the Company's 401(k) Plan (which is more fully described below under the heading "Retirement and Other Benefits"); the amount of perquisites attributable to each named executive officer did not exceed \$10,000 in either 2020 or 2021.

Outstanding Equity Awards at Fiscal Year-End

		0	ption Awards					Stock	k Awards	
(a)	(b)	(c)	(d)		(e)	(f)	(g)	(h)	(i)	(j)
	Number of Securities Underlying Unexercised	Number of Securities Underlying Unexercised	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised		ption	Option	Number of Shares or Units of Stock That Have	Market Value of Shares or Units of Stock That	Equity Incentive Plan Awards: Number of Unearned Shares, Units or Other Rights That	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Other Rights
	Options	Options	Unearned		ercise	Expiration	Not	Have Not	Have Not	That Have
Name	Exercisable	Unexercisable	Options	P	rice	Date	Vested	Vested (1)	Vested	Not Vested
Raymond C. Kubacki Charles Doucot	22,000 42,000 40,000 21,000 30,000 3,750 	7,000 30,000 11,250 - 4,500 15,000 5,250		\$ \$ \$ \$	10.20 13.82 18.87 21.04 10.60 4.07 21.04 10.60 4.07	9/15/2025 5/12/2026 5/4/2027 5/3/2028 5/3/2029 11/11/2030 	26,250 23,000 13,500 12,000	\$ 184,275 \$ 161,460 \$ 94,770 \$ 84,240		
Michael							,	+ + + + + + + + + + + + + + + + + + + 		
I. Schaffer	7,500 8,000 3,750 5,000 500	1,250 5,000 1,500		\$ \$	13.82 18.87 21.04 10.60 4.07	5/12/2026 5/4/2027 5/3/2028 5/3/2029 11/11/2030	5,250 4,500	\$ 36,855 \$ 31,590		

⁽¹⁾ Based on closing price of \$7.02 per share on December 31, 2021 on the Nasdaq Stock Market.

Potential Payments upon Termination and Change in Control

The Company has entered into change-in-control severance agreements with each of Messrs. Kubacki, Doucot and Schaffer providing for severance benefits for a period of up to 12 months in the event of termination within 12 months following a change in control (as defined in the agreements). The agreements provide for severance benefits only if (1) the Company undergoes a change in control (as defined in the agreement) and (2) within 12 months thereafter either (a) the Company (or its successor) terminates the employee (other than termination for "cause"), or (b) the employee terminates his employment for "good reason" (as defined in his agreement). The agreements do not provide for severance benefits in the event of an employee's death or disability, or in the event of his voluntary termination without good reason. The agreements provide that the employee shall not compete with the Company during the period in which he is entitled to receive severance payments. Except for such change-in-control severance agreements, and except for the separate employment severance agreement with Mr. Doucot described below, none of the named executive officers has an employment agreement with the Company.

Each of the stock unit award and option agreements with Messrs. Kubacki, Doucot and Schaffer described in the Summary Compensation Table above provides that the vesting would accelerate upon a change in control. In the event the Company had incurred a change in control on December 31, 2021 and terminated the employment of Messrs. Kubacki, Doucot and Schaffer on such date, the amounts paid out to such named executive officers would have been as follows:

Payments and Benefits Upon Termination and Change in Control

(a)	(b)		(c)		(d)		(e)		(f)
							Acceleration		
			Accrued		Health		of Equity		
Name	Salary (1)	Va	acation (2)	Be	nefits (3)		Awards (4)		Total
Raymond C. Kubacki (5)									
12 Month	\$ 525,000	\$	16,356	\$	31,920	\$	345,735	\$	919,011
6 Month (change of location only)	\$ 262,500	\$	16,356	\$	15,960	\$	345,735	\$	640,551
Charles Doucot (6)									
12 Month	\$ 340,000	\$	9,231	\$	27,907	\$	179,010	\$	556,148
Michael I. Schaffer (6)									•
12 Month	\$ 287,700	\$	7,323	\$	31,920	\$	68,445	\$	395,388

The amounts in column (b) reflect the total amount of Base Salary (at the rate that was in effect for the 12-month period preceding August 1, 2020), commission (if applicable) and Bonus compensation that would continue to be paid to the Executive during the indicated period following a termination in connection with a change-in-control on December 31, 2021. Such amounts are calculated based on the actual base salary, commission and bonus compensation earned or accrued during the prior 12-month period coinciding with or preceding such termination.

Accrued vacation is payable upon separation of service whether or not in connection with a change in control.

The amounts in column (d) represent the amount payable by the Corporation during the applicable period for continuation of health benefits.

The amounts in column (e) reflect: (i) the acceleration of the vesting under stock unit awards granted under the Company's 2006 Incentive Plan triggered by a change in control, as provided in each executive officer's respective stock unit award agreement with the Company, the valuation of which is determined by multiplying the number of stock unit awards that would have become vested on December 31, 2021 pursuant to such acceleration provision, times the closing price of the Company stock on such date (\$7.02 per share); plus (ii) the acceleration of the vesting under in-the-money unvested stock options granted under the Company's 2006 Incentive Plan triggered by a change in control, as provided in each executive officer's respective stock option agreement with the Company, the valuation of which is determined by assuming a net exercise of all unvested stock options having an exercise price that is less than the closing price of the Company stock on such date (\$7.02 per share).

Mr. Kubacki's arrangement provides for 12 months of salary (at the rate that was in effect for the 12-month period preceding August 1, 2020, or any higher rate thereafter in effect) and bonus continuation, in the event of a termination by the Company without cause (as defined in his agreement) or a termination by him for good reason (as defined in his agreement) in either case, within a 12 month period following a change in control of the Company (as such term is defined in the agreement), provided, however, that in the event of termination by Mr. Kubacki for good reason solely on account of a change in his required place of employment, following a change in control, then in lieu of 12 months of salary and bonus compensation, his benefits would be limited to 6 months of salary and bonus compensation.

Mr. Doucot and Dr. Schaffer's arrangements provide for 12 months of salary (at the rate that was in effect for the 12-month period preceding August 1, 2020, or any higher rate thereafter in effect) and bonus continuation, in the event of a termination by the Company without cause (as defined in their respective agreements) or a termination by them for good reason (as defined in their respective agreements) in either case, within a 12 month period following a change in control of the Company (as such term is defined in the agreements).

Employment Severance Agreement

In addition to a change-in-control severance agreement, the Company also entered into an employment severance agreement with Mr. Doucot providing for severance benefits for a period of up to 6 months. The agreement provides for severance benefits if (a) the Company (or its successor) terminates Mr. Doucot (other than termination for "cause"), or (b) Mr. Doucot terminates his employment for "good reason" (as defined in his agreement). The agreement does not provide for severance benefits in the event of his death or disability, or in the event of his voluntary termination without good reason. Any payments under the severance agreement are reduced by the amount of any payments received by him under his change-in-control severance agreement.

Equity Compensation Plan Information

The following table provides information as of December 31, 2021, with respect to shares of the Company's common stock that were issuable under the Company's 2006 Incentive Plan (the "2006 Incentive Plan").

	Number of Securities to Be Issued Upon Exercise of Outstanding Options, Warrants and	Weighted Average Exercise Price of Outstanding Options, Warrants and		Number of Securities that Remained Available for Future
Plan Category	Rights		Rights	Issuance
Equity compensation plans approved by security holders	799,000 (1)	\$	14.23 (2)	285,170
Equity compensation plans not approved by security holders	-		-	-
Total	799,000	\$	14.23	285,170

- (1) This amount includes 575,000 shares subject to outstanding stock options with a weighted average remaining contractual term of 6.1 years and 224,000 shares subject to outstanding stock unit awards.
- (2) The weighted-average exercise price information does not include any outstanding stock unit awards.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The following table shows, as of March 16, 2022, the number of shares beneficially owned (i) by those stockholders who are known to the Company to own beneficially more than five percent of the outstanding Common Stock of the Company, (including their addresses) (ii) by each director and nominee for director of the Company, (iii) by each named executive officer, and (iv) by all directors and executive officers as a group.

Name	Amount and Nature of Beneficial Ownership (1)	Percentage Owned (2)
Renaissance Technologies LLC	372,146 (3)	6.7 %
800 Third Avenue, New York, NY 10022		
Peter H. Kamin	562,191 (4)	10.1 %
Palm Beach Gardens, FL 33410		
Raymond C. Kubacki	371,562 ⁽⁵⁾⁽⁶⁾	6.4%
Fred J. Weinert	237,564 (5)(6)(7)	4.2 %
Walter S. Tomenson, Jr	110,399 (5)(6)	2.0 %
Harry Connick	75,612 ⁽⁵⁾⁽⁶⁾	1.4 %
Robyn C Davis	6,500 (5)(6)	*
Michael I. Schaffer	52,838 (5)(6)	*
Charles Doucot	48,675 (5)(6)	*
All Executive Officers and Directors (8 persons)	904,988 (8)	15.0%

^{*} denotes ownership of less than 1%

- (1) Shares are considered beneficially owned, for the purpose of this table only, if held by the person indicated as beneficial owner, or if such person, directly or indirectly, through any contract, arrangement, understanding, relationship or otherwise has or shares the power to vote, to direct the voting of and/or to dispose of or to direct the disposition of such security, or if the person has the right to acquire beneficial ownership within sixty (60) days, unless otherwise indicated in these footnotes.
- (2) Pursuant to the rules of the Securities and Exchange Commission, shares of Common Stock which an individual or group has a right to acquire within 60 days pursuant to the exercise of options or pursuant to the vesting of stock unit awards are deemed to be outstanding for the purpose of computing the percentage ownership of such individual or group, but with respect to options and stock unit awards, are not deemed outstanding for the purpose of computing the percentage ownership of any other person shown in this table.
- (3) Based on the statement on Schedule 13G/A filed on February 11, 2022, each of Renaissance Technologies, LLC, a registered investment adviser, and Renaissance Technologies Holding Company has sole voting and dispositive power over 372,146 shares of Common Stock.
- (4) Based on a Statement of Changes in Beneficial Ownership on Form 4 filed by Mr. Kamin on March 18, 2022. Includes 313,707 shares held by Mr. Kamin as trustee of certain trusts and 42,553 shares held by a limited partnership of which Mr. Kamin serves as general partner.
- (5) Includes the following number of shares of Common Stock which the individual had a right to acquire within 60 days pursuant to the exercise of options: Mr. Kubacki –155,000; Mr. Weinert 81,500; Mr. Tomenson 63,500; Mr. Connick 1,000; Dr. Schaffer 28,500; and Mr. Doucot 42,250.
- (6) Includes the following number of shares of Common Stock which the individual had the right to receive within 60 days pursuant to the vesting of stock unit awards: Mr. Kubacki –5,750; Mr. Weinert –5,500; Mr. Tomenson 5,500; Mr. Connick 5,500; Ms. Davis 5,500*; Dr. Schaffer 1,125; and Mr. Doucot –3,000...
- (7) Includes 111,381 shares held by Mr. Weinert as trustee of a trust and 1,600 shares held by Mr. Weinert's spouse.
- (8) Includes 371,750 shares which the executive officers and directors had the right to acquire within 60 days pursuant to the exercise of options, and 33,375 shares which were issuable to the executive officers and directors within 60 days pursuant to the vesting of stock unit awards.

Item 13. Certain Relationships and Related Transactions and Director Independence

Under the rules of the Nasdaq Stock Market, a majority of the directors and all of the members of the Audit Committee must qualify as independent directors. The Board of Directors of the Company conducts an annual review of the independence of the members of the Board and its committees. Four of our five directors are nonemployee directors (all except Mr. Kubacki). Although the Board has not adopted categorical standards of materiality for independence purposes (other than those set forth in Securities and Exchange Commission Regulations and the Nasdaq Stock Market listing standards), information provided by the directors and the Company did not indicate any relationships (e.g., commercial, industrial, banking, consulting, legal, accounting, charitable, or familial), which would impair the independence of any of the nonemployee directors.

The Board of Directors has adopted a policy whereby the Company's Audit Committee is responsible for reviewing any proposed related party transaction. The types of transactions covered by the policy include payments for products or services to or indebtedness to or from, related parties, as defined in Item 404(b) of Regulation S-K under the federal securities laws. The Audit Committee has determined that there were no related party transactions with any related party in fiscal 2021 that would require disclosure under Item 404(a) of Regulation S-K.

Item 14. Principal Accounting Fees and Services

The following table presents fees paid or payable to BDO USA, LLP for services attributable to fiscal years 2021 and 2020:

	Fiscal Year				
		2021		2020	
Audit Fees (1)	\$	392,309	\$	394,620	
Audit-Related Fees (2)		15,950		15,650	
Tax Fees (3)		182,275		55,440	
Total	\$	590,534	\$	465,710	

- (1) Audit Fees Fees for professional services rendered to the Company (or estimates of fees for services to be rendered) in connection with auditing the Company's annual financial statements and reviewing the interim financial information included in the Company's Quarterly Reports on Form 10-Q and consents and assistance with the review of documents filed with the Securities and Exchange Commission
- (2) Audit-Related Fees Fees billed to the Company or to the Company's employee retirement plan for services related to the audit of the Company's financial statements that are not reported under Audit Fees, which include audit work performed on certain of the Company's benefit plans.
- (3) Tax Fees Fees billed to the Company related to tax compliance and consultation.

PART IV

Item 15. Exhibits, Financial Statement Schedules

- (a) (1) Financial Statements required by Item 15 are included and indexed in Part II, Item 8.
- (a) (2) Financial Statement Schedules included in Part IV of this report. Schedule II is omitted because information is included in Notes to Financial Statements. All other schedules under the accounting regulations of the SEC are not required under the related instructions and are inapplicable and, thus have been omitted.
 - (a) (3) See "Exhibit Index" included elsewhere in this Report.

Item 16. Form 10-K Summary

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this Report to be signed on its behalf by the undersigned, thereunto duly authorized.

PSYCHEMEDICS CORPORATION

Date: March 30, 2022 /s/ RAYMOND C. KUBACKI

Raymond C. Kubacki

Raymond C. Kubacki

Chairman, President and Chief

Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this Report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

/s/ RAYMOND C. KUBACKI Raymond C. Kubacki	Chairman, President and Chief Executive Officer, Director (Principal Executive Officer)	March 30, 2022
/s/ ANDREW LIMBEK Andrew Limbek	Vice President, Controller (Principal Financial and Accounting Officer)	March 30, 2022
HARRY CONNICK* Harry Connick	Director	
WALTER S. TOMENSON, JR* Walter S. Tomenson, Jr.	Director	
FRED J. WEINERT* Fred J. Weinert	Director	
ROBYN C. DAVIS* Robyn C. Davis	Director	
*By: /s/ RAYMOND C. KUBACKI	Attorney-in-Fact	March 30, 2022







MANAGEMENT AND CORPORATE INFORMATION

BOARD OF DIRECTORS

Raymond C. Kubacki Chairman, President and CEO

Andrew M. Reynolds Independent Director

Walter S. Tomenson, Jr. Independent Director

Fred J. Weinert Independent Director

Robyn C. Davis Independent Director

COUNSEL

Lynch Fink Harrington & Gray LLP Boston, Massachusetts

AUDITORS

BDO USA, LLP Boston, Massachusetts

TRANSFER AGENT

Computershare P.O. BOX 505000 Louisville, KY 40233-5000

Overnight correspondence should be sent to:

Computershare 462 South 4th Street, Suite 1600 Louisville, KY 40202

877-373-6374 (1-781-575-3120)

Internet Address: www.computershare.com

ANNUAL MEETING

The 2022 Annual Meeting of Stockholders will be held on August 12, 2022 10:00 A.M. at:
The Seaport Hotel
200 Seaport Boulevard
Boston, Massachusetts

CORPORATE OFFICERS

Raymond C. Kubacki Chairman, President and CEO

Charles Doucot

Executive Vice President

Michael I. Schaffer, Ph.D.

Vice President, Laboratory Operations

Andrew Limbek

Vice President, Controller

CORPORATE INFORMATION

WEBSITE: www.psychemedics.com

Stock Exchange Symbol: PMD - NASDAQ

CORPORATE OFFICES

Corporate Headquarters: 289 Great Road, #200 Acton, Massachusetts 01720

Primary Laboratory Facility: 5832 Uplander Way Culver City, California 90230

FORM 10-K

A copy of the Company's Form 10-K, as filed with the Securities and Exchange Commission, may be obtained by any stockholder at our website or by writing to:

Investor Relations Psychemedics Corporation 289 Great Road, #200 Acton, MA 01720



289 GREAT ROAD, ACTON, MA 01720

WWW.PSYCHEMEDICS.COM