As filed with the Securities and Exchange Commission on July 20, 2022.

Registration No. 333-266086

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

AMENDMENT NO. 1

TO

FORM S-1

REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

AEROCLEAN TECHNOLOGIES, INC.

(Exact name of Registrant as specified in its charter)

Delaware	**3841**	**45-3213164**
(State or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification Number)

10455 Riverside Drive
Palm Beach Gardens, FL 33410
Telephone: (833) 652-5326

(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

Jason DiBona
c/o AeroClean Technologies, Inc.
10455 Riverside Drive
Palm Beach Gardens, FL 33410
Telephone: (833) 652-5326

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

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Palm Beach Gardens, FL 33410
Telephone: (833) 652-5326

Approximate date of commencement of proposed sale to the public: From time to time after this registration statement is declared effective.

If any of the securities being registered on this Form are offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act, check the following box. ☒

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

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

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

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided to Section 7(a)(2)(B) of the Securities Act. ☐

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to Section 8(a), may determine.

Subject to Completion, Preliminary Prospectus Dated July 20, 2022

3,000,000 Shares of Common Stock offered by the Selling Stockholder

This prospectus relates to the offering and resale, from time to time, by the selling stockholder identified in the "Selling Stockholder" section herein (the "Selling Stockholder") of up to an aggregate of (i) 1,500,000 shares of our common stock, par value $0.01 per share, and (ii) 1,500,000 shares of common stock, par value $0.01 per share, issuable upon the exercise of outstanding warrants. 1,500,000 shares of our common stock, and the warrant to purchase up to 1,500,000 shares of our common stock, were issued by us pursuant to a Securities Purchase Agreement, dated as of June 26, 2022, with a single institutional investor (the "Private Placement"). Please see "Private Placement of Shares of Common Stock and Warrants" beginning on page 65 of this prospectus.

We will not receive any proceeds from the sale of shares of common stock by the Selling Stockholder. However, upon the cash exercise of the warrant, we will receive the exercise price of such warrant, for an aggregate amount of $16.5 million if the warrant is exercised in full.

The Selling Stockholder may sell all or a portion of the shares of common stock beneficially owned by it and offered hereby from time to time directly or through one or more underwriters, broker-dealers or agents. Please see the section entitled "Plan of Distribution" on page 67 of this prospectus for more information. For information on the Selling Stockholder, see the section entitled "Selling Stockholder" on page 66 of this prospectus. We will bear all fees and expenses incident to our obligation to register the shares of common stock.

Our common stock is listed on the Nasdaq Capital Market ("Nasdaq") under the symbol "AERC". On July 19, 2022, the last reported sale price of our common stock on Nasdaq was $10.29 per share.

The Selling Stockholder will offer its shares at prevailing market prices or privately negotiated prices.

We are an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012 and have elected to comply with certain reduced public company reporting requirements. In addition, as a "smaller reporting company" within the meaning of Rule 405, we are following the Form S-1 disclosure requirements for smaller reporting companies.

Investing in our securities involves a high degree of risk. See "Risk Factors" beginning on page 16 to read about factors you should consider before buying our securities.

We may amend or supplement this prospectus from time to time by filing amendments or supplements to the extent required. You should read the entire prospectus and any amendments or supplements carefully before you make your investment decision.

Neither the Securities and Exchange Commission ("SEC") nor any other regulatory body has approved or disapproved of these securities or passed upon the accuracy or adequacy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is , 2022

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ABOUT THIS PROSPECTUS

Neither we nor the Selling Stockholder have authorized anyone to provide any information or to make any representation other than those contained in this prospectus or in any free writing prospectuses we have prepared. We and the Selling Stockholder take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. This prospectus is an offer to sell only the shares offered by this prospectus, but only under circumstances and in jurisdictions where it is lawful to do so. The information contained in this prospectus is current only as of its date. Our business, financial condition, results of operations and prospectus may have changed since that date.

For investors outside of the United States: Neither we nor the Selling Stockholder have taken any action that would permit the offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose may be required, other than in the United States. Investors must inform themselves about and observe any restrictions relating to this offering and the distribution of this prospectus outside the United States.

Neither the delivery of this prospectus nor any sale made hereunder shall, under any circumstances, create an implication that there has been no change in the affairs of the Company since the date hereof. Information contained in the preliminary prospectus is subject to completion or amendment.

MARKET AND INDUSTRY DATA

Unless otherwise indicated, information contained in this prospectus concerning our industry and the markets in which we operate, including our general expectations and market position, market opportunity and market size, is based on reports from various sources. In some cases, we do not expressly refer to the sources from which this data is derived. In that regard, when we refer to one or more sources of this type of data in any paragraph, you should assume that other data of this type appearing in the same paragraph is derived from the same sources, unless otherwise expressly stated or the context otherwise requires.

Because this information involves a number of assumptions and limitations, you are cautioned not to give undue weight to such information. While we have not independently verified market data and industry forecasts provided by any of these or any other third-party sources referred to in this prospectus, we believe such sources to be reliable and are not aware of any misstatements in such information.

In addition, projections, assumptions and estimates of our future performance and the future performance of the industry in which we operate are necessarily subject to a high degree of uncertainty and risk due to a variety of factors, including those described in the section entitled “Risk Factors” and elsewhere in this prospectus. These and other factors could cause results to differ materially from those expressed in the estimates made by third parties and by us.

TRADEMARKS

“Pūrgo™”, “PūrgoLift™”, “SteriDuct™” and related names are trademarks that are owned by AeroClean Technologies, Inc. Solely for our convenience, trademarks and trade names referred to in this prospectus may appear without the “®” or “™” symbols, but such references are not intended to indicate, in any way, that we will not assert, to the fullest extent possible under applicable law, our rights or the rights to these trademarks and trade names. We do not intend our use or display of other companies’ trade names, trademarks or service marks to imply a relationship with, or endorsement or sponsorship of us by, any other companies. Each trademark, trade name or service mark of any other company appearing in this prospectus is the property of its respective holder.

SUMMARY

This summary highlights certain information appearing elsewhere in this prospectus and does not contain all the information you should consider before making an investment decision. For a more complete understanding of this offering, you should read the entire prospectus carefully, together with the documents incorporated herein by reference, including our financial statements and the notes thereto and the information set forth under "Risk Factors." Unless otherwise indicated or the context otherwise requires, all references in this prospectus to "we," "us," "our," the "Company," "AeroClean," "AeroClean Technologies" and similar terms refer to AeroClean Technologies, LLC or to AeroClean Technologies, Inc. (depending on whether the statement relates to the period before or after our reorganization as a corporation in connection with our initial public offering ("IPO")).

Overview

AeroClean Technologies is an interior space air purification technology company. Our immediate objective is to initiate full-scale commercialization of our high-performance interior air sterilization and disinfection products for the eradication of harmful airborne pathogens, including coronavirus ("COVID-19").

We were established to develop unmatched, technology-driven medical-grade air purification solutions for hospitals and other healthcare settings. The onset of the COVID-19 global pandemic underscores the urgency of bringing to market air purification solutions to help protect front-line healthcare workers, patients and the general population.

Interior air sterilization and disinfection solutions are critical for enabling and furthering societal transition to a safe, post-COVID-19 environment and for protecting patients, particularly immunocompromised patients, and staff in medical and healthcare facilities.

We incorporate our proprietary, patented UV-C LED technology in equipment and devices to reduce the exposure of occupants of interior spaces to airborne particles and pathogens. These spaces include hospital and non-hospital healthcare facilities (such as outpatient chemotherapy and other infusion facilities and senior living centers and nursing homes), schools and universities, commercial properties and other indoor spaces.

In July 2021, we completed the development stage of our first device, the Pūrgo room air purification unit, including design and independent testing and certification, as well as the scale-up of manufacturing, and began commercial production and sales. Pūrgo's launch also marks the debut of our go-to-market strategy for SteriDuct, our patented air purification technology. We intend to incorporate SteriDuct into a broad line of autonomous air treatment devices. In February 2022, we debuted a prototype of Pūrgo Lift, our air purification solution for elevators and other wall-mount applications, and since then, certain of our customers have been testing and evaluating Pūrgo Lift for future deployment in their facilities.

To support the transition to commercial operations, in July 2021, we also completed the build out of our corporate headquarters in Palm Beach Gardens, Florida, which includes our warehouse and distribution facility, as well as the site for our future service operations.

Our products are being designed and engineered to exceed the rigorous standards set by the U.S. Food and Drug Administration (the "FDA") for Class II medical devices used for interior air sterilization and disinfection products. In June 2022, the FDA granted our Pūrgo technology 510(k) clearance for use in healthcare and other markets for which product performance to reduce the amount of certain airborne particles and infectious microbes in an indoor environment must be validated to specific standards. Our Pūrgo technology was tested and certified to meet such standards by independent laboratories. Regulatory clearances and independent certifications serve as important indications of product quality and performance that also influence decision-making by non-healthcare market equipment purchasers.

Pūrgo has been well-received by our customers. Our success depends to a large extent on our ability to increase sales of our Pūrgo device during 2022 and beyond.

We have incurred operating losses each year since our inception and have only begun to recognize revenue starting in July 2021. We incurred losses of $2.6 million, $7.9 million and $3.3 million during the

three months ended March 31, 2022 and the years ended December 31, 2021 and 2020, respectively, and had an accumulated deficit of $4.3 million as of March 31, 2022. As of March 31, 2022, the Company had aggregate cash of $17,774,097.

Background and Purpose

We were established by our co-founders, Amin J. Khoury, PhD (Hon), our Chairman; David Helfet, M.D., our Chief Medical Officer; and Mark Krosney, our Chief Scientific Officer, to fulfill their determination to provide solutions for the critical challenges posed by harmful airborne pathogens and resultant hospital acquired infections ("HAIs").

HAIs and other infections acquired in outpatient treatment facilities present an extreme risk to the immunocompromised patient population. In the U.S. alone, it is estimated that 10 million people are immunocompromised. Whether in hospitals or infusion treatment locations, patients with cancer, and a multitude of other disease and disease related treatments, are at an elevated risk of infection. Constant air purification is of extreme benefit in these settings in order to minimize the presence of dangerous airborne pathogens due to the often catastrophic risk that infection poses to the immunocompromised patient population. It is estimated that there are approximately 2 million HAIs annually in the United States, causing approximately 100,000 deaths and costing over $30 billion. These numbers are in-hospital only and do not include the likely much larger number of patients infected in outpatient infusion and treatment centers. For one example, there are more than 650,000 cancer patients that receive outpatient chemotherapy, and they are at risk for acquiring infections in these treatment facilities, despite advanced filtration and ventilation systems. In general, 60,000 cancer patients are hospitalized annually for chemotherapy-induced neutropenia and infections — one patient dies every two hours from this complication.

The onset of COVID-19 has increased our urgency to create innovative and more effective air purification solutions for the risks posed by harmful airborne pathogens, including coronavirus and other viruses, bacteria, molds, particles, fungi and allergens. Studies have shown 85% of COVID-19 transmission to be airborne person-to-person in the form of aerosolized droplets and in enclosed spaces. The Journal of Science estimates the annual U.S. cost of flu and respiratory infections at $50 billion, and the World Health Organization estimates that 4 million premature deaths annually are caused by air pollution.

The genesis of our proprietary air purification technology traces back to efforts to address commercial aircraft cabin air quality. Mr. Krosney is a highly-accomplished scientist who is primarily responsible for numerous patents, several of which are important components of our IP portfolio. Mr. Krosney is a former senior scientist and engineer at B/E Aerospace. Dr. Khoury, the founder and long-time Chairman and Chief Executive Officer of B/E Aerospace, envisioned the significant potential to apply such proprietary technology for revolutionary, medical-grade air purification solutions for hospital and other critical healthcare settings. Dr. Khoury consulted with Dr. David Helfet, a leading orthopedic surgeon at both the Hospital for Special Surgery and New York-Presbyterian Hospital, regarding possible solutions for the critical challenges to patients and hospitals posed by harmful airborne pathogens and HAIs.

This collaboration has served as the foundation for our Company and the implementation of our business plan. Dr. Khoury made a substantial investment in the Company, leading an investment group providing the necessary capital to develop the Company's substantial intellectual property portfolio and products.

Dr. Khoury is a renowned industrialist recognized for bringing to market game-changing solutions for diverse challenges and for building market-leading global businesses. Dr. Khoury was Chairman and Chief Executive Officer of B/E Aerospace, a Nasdaq-listed S&P 400 diversified industrial company, sold in April 2017 to Rockwell Collins (now, part of Raytheon) for $8.6 billion. Previously, in December 2014, B/E Aerospace completed the spin-off of KLX Inc. as an independent Nasdaq-listed public company, itself sold in May 2018 to Boeing for $4.25 billion. Drs. Khoury and Helfet were long-time colleagues who served together for many years on the board of directors of Synthes, Inc., which, led by Dr. Khoury's efforts, completed a $21 billion merger in 2012, creating DePuy Synthes, Johnson & Johnson's global orthopaedics business.

Several other members of our leadership team have long-standing working relationships with Dr. Khoury, including in senior-level roles at B/E Aerospace and KLX Inc.

Our Team

To more effectively exploit our patents and proprietary technology, we have assembled a team of highly credentialed scientists, with advanced degrees in electrical, mechanical and software engineering, as well as in physics, chemistry and related fields, in the development of our devices. This team, in conjunction with their counterparts from our FDA regulated contract manufacturing partner, have driven both the device performance and manufacturing optimization during the development stage of our Company and have positioned our Pūrgo device to be decisively superior, on both a performance and price basis, to existing FDA cleared (or seeking clearance) air purification devices currently on the market. Our team enabled us to develop our submission package, which received FDA 510(k) clearance to market the Pūrgo device.

Publicly traded companies at which our leaders have or have had active roles include: B/E Aerospace, Inc., a Nasdaq listed company until its acquisition by Rockwell Collins, at the time a NYSE listed company, in 2016; Lennar Corporation (NYSE: LEN); KLX Inc., a Nasdaq listed company until its acquisition by The Boeing Company (NYSE: BA) in 2018; KLX Energy Services Holdings, Inc. (Nasdaq: KLXE) ("KLX Energy"); Bank of America Corporation (NYSE: BAC); Moelis & Company (NYSE: MC); Moly Mines Ltd, an Australian Stock Exchange ("ASX") listed company that was acquired by Young Australian Mines Ltd; Puritan Bennet Corporation, a Nasdaq listed company acquired by Nellcor Incorporated (Nasdaq: NELL) in 1995, forming Nellcor Puritan-Bennet; Schering Plough Laboratories, a private company acquired by Merck & Co. (NYSE: MRK) in 2009; United Technologies, a NYSE listed company until its acquisition in 2020 by Raytheon Corporation to form Raytheon Technologies Corp. (NYSE: RTX); and Wyeth Laboratories, a NYSE listed company acquired by Pfizer (NYSE: PFE) in 2009. Members of our leadership team also played important management and scientific development roles or were also early investors for a number of healthcare companies and committees.

Senior members of our team include:

Amin J. Khoury, PhD (Hon). Dr. Khoury is one of our co-founders and has been the Chairman of our Board of Directors since May 2020. Previously, Dr. Khoury served as Chief Executive Officer and Chairman of the Board of Directors of KLX Inc. from its formation in December 2014 until its sale to The Boeing Company in October 2018. Dr. Khoury served as Chairman of the Board, Chief Executive Officer and Co-Chief Executive Officer of B/E Aerospace from its founding in 1987 until its sale to Rockwell Collins in 2017. Dr. Khoury also served as Chairman, Chief Executive Officer and President of KLX Energy from September 2018 until May 2020. Dr. Khoury was a Trustee of the Scripps Research Institute from May 2008 until July 2014. Until 2012, for 26 years, Dr. Khoury also served as a director of Synthes, Inc., having earlier been Chairman of Synthes Maxillofacial, and a founding investor in Spine Products, Inc., which was acquired by Synthes in 1999. Synthes, a $4 billion annual revenue company, was the world's leading manufacturer and marketer of orthopedic trauma implants and a leading global manufacturer and marketer of cranial-maxillofacial and spine implants, before Dr. Khoury led an effort to merge Synthes with Johnson & Johnson in a $21 billion transaction in 2012. Dr. Khoury holds an Executive Masters Professional Director Certification, the highest level, from the American College of Corporate Directors and a Master's Degree in Business Administration from Northeastern University. Dr. Khoury has served as a member of the Board of Trustees of Northeastern University since July 2018 and received an honorary doctorate from Northeastern University in May 2019. Dr. Khoury is a highly effective leader in organizational design and development matters and has been instrumental in identifying and attracting our managerial talent, team of highly accomplished scientists and Board members. He has an intimate knowledge of the Company, our industry and our competitors. All of the above experience and leadership roles uniquely qualify him to serve as our Company's Chairman of the Board.

David Helfet, M.D. Dr. Helfet is one of our co-founders and is currently our Chief Medical Officer and a Director. He is currently a Professor of Orthopaedic Surgery at the Weill Medical College of Cornell University and Director of the Combined Orthopaedic Trauma Service at both the Hospital for Special Surgery and New York-Presbyterian Hospital. He has served on several committees of the American Academy of Orthopaedic Surgeons, the AO/ASIF Foundation (currently the Chairman of AO Documentation and Publishing), AO North America and the American Board of Orthopaedic Surgery, among others. In addition, Dr. Helfet has been extensively involved in the Orthopaedic Trauma Association, including as President from 1998 to 1999, and is still on its board as a past President. He was Assistant Professor of Orthopaedic Surgery at Johns Hopkins University School of Medicine from 1982 to 1986,

Associate Professor and Chief of Orthopaedic Trauma at the University of South Florida School of Medicine/Tampa General Hospital from 1986 to 1991 and at the Cornell University Medical College from 1991 to 1998. Dr. Helfet has been the recipient of many honors and awards, has published extensively on orthopedic trauma topics and is annually ranked as one of New York Magazine's "Best Doctors in New York" and Castle-Connolly's "America's Top Doctors." Dr. Helfet completed his undergraduate studies at the University of Cape Town, receiving a Bachelor of Science degree in biochemistry with honors, followed by medical school, where he received Bachelor of Medicine and Bachelor of Surgery degrees in 1975. His internship and surgical residency were completed at Edendale Hospital in Pietermaritzburg, South Africa and at Johns Hopkins University in Baltimore, Maryland, followed by orthopaedic residency also at Johns Hopkins University, then fellowships at the University of Bern, Insel Hospital in 1981 and at UCLA from 1981 to 1982. Dr. Helfet brings a unique perspective to our Board as a world renowned orthopedic surgeon, which, along with his intimate knowledge of our Company and our industry, uniquely qualifies him to serve as a member of our Board.

Mark Krosney. Mr. Krosney is one of our co-founders and is our Chief Scientific Officer. He has been the driving force in the development of AeroClean Technologies' proprietary technology. Mr. Krosney is primarily responsible for numerous patents, including several that are important parts of our IP portfolio. Mr. Krosney is a key member of the development team for the Pūrgo air purification and disinfection product development project. Prior to becoming Vice President and General Manager of B/E Aerospace's Business Jet Group, Mr. Krosney was B/E Aerospace's technical interface with The Boeing Company, Airbus and the Federal Aviation Administration. Earlier in his career, Mr. Krosney worked on jet engine and rocket propulsion systems as well as technical control systems at United Technologies. Mr. Krosney received his Bachelor of Science degree in Engineering from Carnegie Mellon University and a Master of Science degree in Management of Technology from the Sloan School at the Massachusetts Institute of Technology.

Jason DiBona. Mr. DiBona has served as our Chief Executive Officer since May 2020. Mr. DiBona brings more than 25 years of experience in developing and executing strategies for sustainable growth. He has held leadership roles in medical and healthcare technologies, global sales operations and start-up environments and has experience working with diverse private and public sector clients in more than 120 countries. Mr. DiBona spent the majority of his career, from 1999 to 2014, at GE Healthcare, holding multiple leadership and business development roles across the global healthcare organization. After his time at GE Healthcare, from 2014 to 2018, Mr. DiBona led the sales and marketing efforts at ePreop, a start-up medical software developer, with a successful launch and exit in the role of Executive Vice President of Sales and Marketing. Prior to AeroClean, Mr. DiBona served as Senior Vice President of Global Sales Strategies for America's largest homebuilder, Lennar Corporation. Mr. DiBona earned his Bachelor of Science degrees in Molecular Biology and Microbiology from the University of Central Florida.

Ryan Tyler. Mr. Tyler has served as our Chief Financial Officer since October 2020. Prior to joining AeroClean, Mr. Tyler held various positions from 2014 to 2020 at B/E Aerospace, Inc., KLX Inc. and KLX Energy Services Holdings, Inc., including Vice President, overseeing financial reporting, internal controls, corporate development, investor relations and financial planning and analysis. Prior to the KLX Inc. spin-off from B/E Aerospace, Mr. Tyler served as B/E Aerospace's Director of Financial Reporting and Internal Controls from 2013 to 2014, where he focused on the company's public filings, mergers and acquisitions and capital raises. Mr. Tyler also spent three years at Oxbow Carbon LLC, serving as a Controller responsible for several of the company's lines of business over the three-year period. Mr. Tyler spent five years at Ernst & Young as a Manager providing audit services to public and private clients in multiple sectors, including telecommunications, real estate, healthcare, financial services and distribution. Mr. Tyler received his Bachelor and Master of Accounting degrees from the University of Florida and received a Certified Public Accountant designation in Florida (inactive).

Michael Senft. Mr. Senft currently serves on our Board, where he is the Lead Independent Director. Over the past two years, Mr. Senft has served as a strategic advisor to several other venture stage companies, including acting as senior advisor to Critical Response Group, a venture-stage company established to apply battlefield protocols to homeland security applications. From 2014 to 2018, Mr. Senft served as Vice President-Chief Financial Officer, Treasurer and Head of Investor Relations of KLX Inc. Prior to his role at KLX Inc., Mr. Senft was an investment banker for over 30 years, including roles as Senior Managing Director at Moelis & Company, Global Head of Leveraged Finance at CIBC and Global Co-Head of

Leveraged Finance at Merrill Lynch. Mr. Senft has also served on the Boards of Directors of B/E Aerospace, Del Monte Foods and Moly Mines Ltd. Mr. Senft received his Bachelor of Arts degree in Economics from Princeton University and his Master of Business Administration degree from the Stern School of Business at New York University. Mr. Senft's education and extensive experience in strategic business planning, coupled with a deep understanding of our business, uniquely qualify him to serve as a member of our Board.

Thomas P. McCaffrey. Mr. McCaffrey currently serves on our Board. He has been a member of the Board of Directors of KLX Energy since April 22, 2020. Mr. McCaffrey served as President, Chief Executive Officer and Chief Financial Officer of KLX Energy from May 2020 until July 2020 and as Senior Vice President and Chief Financial Officer of KLX Energy from September 2018 until April 30, 2020. Prior to that, Mr. McCaffrey served as President and Chief Operating Officer of KLX Inc. from December 2014 until its sale to The Boeing Company in October 2018 and as Senior Vice President and Chief Financial Officer of B/E Aerospace from May 1993 until December 2014. Prior to joining B/E Aerospace, Mr. McCaffrey practiced as a Certified Public Accountant for 17 years with a large international accounting firm and a regional accounting firm based in California. Since 2016, Mr. McCaffrey has served as a member of the Board of Trustees of Palm Beach Atlantic University and serves as a member of its various committees and is currently Chairman of its Audit Committee. Mr. McCaffrey received his Bachelor of Science degree in Business Administration with a concentration in Accounting from California Polytechnic State University-San Luis Obispo. Our Board benefits from Mr. McCaffrey's extensive leadership experience, thorough knowledge of our business and extensive strategic planning and public company experience.

Heather Floyd. Ms. Floyd currently serves on our Board. Ms. Floyd also currently serves as Director, Financial Reporting & Technical Accounting at Sequa Corporation. Previously, Ms. Floyd served as Vice President — Finance and Corporate Controller of KLX Energy and Vice President - Finance and Corporate Controller of KLX Inc. from February 2014 until September 2021. Ms. Floyd has almost 20 years of combined accounting, auditing, financial reporting and Sarbanes-Oxley compliance experience. Prior to joining KLX Inc., Ms. Floyd held various positions at B/E Aerospace, including most recently Vice President - Internal Audit. Prior to joining B/E Aerospace, Ms. Floyd served as an Audit Manager with Ernst & Young and in various accounting roles at Corporate Express, now a subsidiary of Staples. Ms. Floyd is a Certified Public Accountant licensed to practice in Florida. Ms. Floyd received her Bachelor of Science and Engineering and Bachelor of Business Administration in International Business and Trade from Florida Atlantic University. Ms. Floyd's extensive accounting, auditing, financial reporting and public company experience qualify her to serve as a member of our Board.

Timothy J. Scannell. Mr. Scannell currently serves on our Board of Directors. Mr. Scannell brings over 30 years of experience and success delivering market-leading results from his leadership roles at Stryker Corporation ("Stryker"), one of the world's leading medical technology companies. Mr. Scannell served as President and Chief Operating Officer of Stryker between 2018 and 2021, overseeing all of Stryker's commercial businesses and regions globally. Prior to this, he served as group president for Stryker's MedSurg & Neurotechnology businesses for ten years. Mr. Scannell currently serves as a director and non-executive chairman of the Board of Directors for Insulet Corporation and is a director on the boards of Novocure Limited, Renalytix plc and Collagen Matrix, Inc. Mr. Scannell attended the University of Notre Dame, where he received a bachelor's degree in Business Administration and Marketing and his Master of Business Administration. Mr. Scannell's extensive leadership experience, particularly with respect to public companies within the medical industry, qualify him to serve as a member of our Board.

Jimmy Thompson. Mr. Thompson is our Vice President of Strategic Sales. Over the course of three decades, Mr. Thompson has served many leadership roles in the healthcare industry. For the past 19 years at Cerner Corporation, Mr. Thompson has built and led highly successful teams at nationally recognized healthcare systems including: Broward Health, Moffitt Cancer Center, and Advent Health. Among his many accomplishments, Mr. Thompson is most recognized for leading proven business development strategies for CareAware — starting as a new platform by Cerner Corporation — a world-leading supplier of health information technology services, devices, and hardware used at more than 27,000 facilities around the world. Prior to Cerner, he held key sales roles at GE Healthcare and SIMS Portex and began his career working at Baptist Hospital in Nashville, Tennessee.

Nick DeAngelis, PhD. Dr. DeAngelis is our Director of Regulatory Affairs & Quality and, as a self-employed consultant, is a key member of the development team for the Pūrgo air purification and disinfection product development project. Dr. DeAngelis has over 40 years of experience in pharmaceutical companies, 25 years of which was at senior management levels, including Senior Director of the Analytical and Physical Chemistry departments at Wyeth Laboratories, a NYSE-listed public company acquired by Pfizer in 2009, and at Schering Plough Laboratories, a private company acquired by Merck & Co. in 2009. Dr. DeAngelis has worked for a number of years as a self-employed consultant assisting numerous pharmaceutical and medical device companies in product development and quality assurance. Dr. DeAngelis holds a Bachelor of Science degree in Physics, a Master of Science degree in Chemistry and a PhD in Chemistry from Villanova University.

Edward Lanzilotta, PhD. Employed at Intelligent Product Solutions, a leading medical and technology device engineering group ("IPS"), Dr. Lanzilotta is a key member of the development team for the Pūrgo air purification and disinfection product development project. He has held engineering and management positions at Draper Laboratory, Bolt, Beranek & Newman, American Science and Engineering, Scientific Systems Corp. and Airborne Instruments Laboratory. Dr. Lanzilotta holds a Bachelor of Science degree in Electrical Engineering, a Master of Science degree in Mechanical Engineering and a PhD in Mechanical Engineering from the Massachusetts Institute of Technology.

Rao Tella. Mr. Tella is our Director of Operations. He has been employed by Eaton Aerospace, Puritan Bennet Corporation, a Nasdaq-listed company acquired by Nellcor Incorporated in 1995 to form Nellcor Puritan-Bennet, and B/E Aerospace in various capacities, including Manager of R&D, Director of Operations, P&L responsibility as Vice President/General Manager of a $400 million business and Vice President of corporate strategy. Mr. Tella holds a Bachelor of Science degree in Engineering from the Indian Institute of Technology located in Chennai, a Master of Science degree in Engineering and a Master of Business Administration degree from the University of Minnesota and has completed a strategic studies program at Harvard University.

Bill Reisenauer. Mr. Reisenauer is our Lead Engineer on Pūrgo UV Subsystem Design, is a key member of the development team for the Pūrgo UV air purification and disinfection product development project and is the lead Engineer on the Pūrgo UV subsystem design, test and qualification. At B/E Aerospace, Mr. Reisenauer was the director of engineering for the lighting products group and drove the introduction of LED technology into business and commercial aircraft lighting. Mr. Reisenauer holds a Master of Science degree in Electrical Engineering and a Bachelor of Science degree in Electrical Engineering from the Polytechnic Institute of New York and a Master of Business Administration from Adelphi University.

Karl Keppeler. Mr. Keppeler is our Lead Engineer on the Electrical Engineering and Embedded Software Subsystems and is a key member of the development team for the Pūrgo air purification and disinfection product. Mr. Keppeler is an IPS Fellow at IPS, where he has worked for over 11 years on customer projects in a range of industries. Prior to joining IPS, Mr. Keppeler worked in a variety of industries, including payment automation, telecommunications, mobile computing and vehicle electrification. Mr. Keppeler holds a Bachelor of Science degree and a Master of Engineering degree in Electrical Engineering and Computer Science from the Massachusetts Institute of Technology.

Joseph Toro. Mr. Toro is our Lead Industrial Design Engineer and is a key member of the development team for the Pūrgo air purification and disinfection product development project. Currently the director of Industrial Design at IPS, Mr. Toro has more than 20 years of experience developing award winning innovative solutions for consumer and professional products. Mr. Toro directed the design of products ranging from miniature motion control solutions for B/E Aerospace and medical clients to household appliances for Applica Black and Decker. Mr. Toro holds a Bachelor of Science degree in Industrial Design from the University of Bridgeport. Mr. Toro's team has worked closely with Mr. Krosney in the design of PūrgoLift, our elevator implementation product line.

Our Strategy

Our mission is to establish AeroClean Technologies as the leader in creating a safe indoor environment, free of dangerous pathogens, particles, allergens, mold and fungi, for the healthcare, commercial office, educational and transportation marketplaces. Our goal is to become the leading provider of airborne

pathogen-eradication solutions, through the application of air sanitization using our UV-C LED technology, and to create comprehensive solutions for at-risk enclosed spaces across hospitals, outpatient treatment facilities, universities and schools, senior living and nursing homes, non-hospital healthcare facilities, commercial buildings and the human transport and travel industries.

The key elements of our strategy are:

- Establish our technology and brand by beginning the commercial production and sale of the Pūrgo air purification device predominantly to hospitals and outpatient treatment facilities and the healthcare and medical office market, including surgery centers and doctors' offices.
- Utilize third party FDA regulated contract manufacturing to launch the Pūrgo office air purification device and establish a commercial footprint.
- Accelerate development and market introduction of our prototype PūrgoLift air purification solution for elevators, which is a critical need for large buildings to support occupants returning to and continuing to work in these buildings safely. Elevators create a point of acute vulnerability in both office buildings and in hospitals, where patients and outsiders are being transported at the same time, and who may carry pathogens into an environment where people are particularly vulnerable.
- Capitalize on the aviation industry expertise and credibility of the former founder and executive officers of B/E Aerospace, who are now leading AeroClean Technologies, to create strategic alliances with aviation industry suppliers to provide both ground-based and in-flight air purification systems based upon patented SteriDuct UV-C LED technology.
- Explore opportunities for collaboration and partnership with global industry leaders in heating, ventilating and air conditioning ("HVAC") to extend our UV-C LED air purification technology to the integrated air handling systems of large buildings.
- Identify opportunities to establish and extend our industry leadership internationally, through selective joint ventures and acquisitions that further capitalize on our superior technology.

The Company's strategy includes continuously evaluating a wide range of strategic opportunities including acquisitions. As part of that strategy, the Company is in discussions with several acquisition candidates and may seek to effect transactions that the Company believes would substantially increase revenues, distribution and selling capability, and expand product lines, and, most importantly, add sensor and monitoring technology to enable the Company to effect its recurring revenue "Safe Air As a Service" model. The Company's goal is to provide actionable data to clients through the internet of things (IOT) to enable clients to provide Indoor Air Quality (IAQ) as part of their Indoor Environmental Quality (IEQ) initiatives. The Company currently has no material agreements or arrangements with any of the several acquisition candidates and there can be no assurance that any of these acquisitions, or any others, will be consummated.

Our Strengths

We believe AeroClean Technologies is uniquely positioned to capitalize on the emerging market for air sterilization products and services and that we will act as a disrupter to the existing hierarchy of traditional HVAC and cleaning businesses that do not adequately address the emerging threat of human pathogen cross infection and transmission.

We believe our principle strengths in capturing this opportunity are:

- Superior core technology embedded in our patented, UV-C LED air treatment technology utilized in the Pūrgo air purification device, which the FDA has indicated that we can market and sell for intended use through 510(k) clearance.
- Efficacy validated through independent testing at third party laboratories and FDA 510(k) clearance, validating the design and manufacturing rigor of the Pūrgo air purification device.
- Our growing team of dedicated engineers, regulatory officers and sales and marketing professionals, which we believe will provide our Company with a significant competitive advantage over our smaller and regional competitors, as well as those larger competitors who are not focused specifically on

pathogen elimination as a dedicated priority and do not currently have truly competitive products in their portfolios of products and services.

- Our executive team, which includes our chief executive officer and chief financial officer, with backgrounds in building and leading international healthcare sales teams and growing large, international public companies organically and through strategic acquisitions, respectively, establishing the cornerstone of a first-class management team.
- Time, capital and expertise of the team dedicated to the development and manufacturing of the Pūrgo air purification device, which separates it from its competition and which we believe will generate differential outcomes when marketing to hospital and non-hospital healthcare customers as well as other discriminating target markets.
- The credibility in the healthcare market afforded us by our founding partner and Chief Medical Officer, Dr. David Helfet.
- The business building acumen and leadership of our founding partner, Amin J. Khoury. Dr. Khoury, as the Founder and formerly Chairman and Chief Executive Officer of B/E Aerospace, the world's leading commercial aircraft cabin interiors company prior to its acquisition by Rockwell Collins, built the business through both organic growth and acquisitions, by establishing superior in-house engineering and global sales capability, and by driving innovations across product categories, thereby establishing B/E Aerospace as the world leader and differential partner to its airline customers, as well as to The Boeing Company, Airbus and the business jet manufacturers.
- The expertise and leadership of Jason DiBona, to lead the Company as Chief Executive Officer, who we believe provides us with strong judgment on the healthcare industry's future development trends based on his prior experience at GE Healthcare.
- Our product is priced such that it can be quickly implemented and fit within multiple budgets, making it marketable to a wide range of hospital medical departments and other customers.

Our History

The genesis of our SteriDuct and Pūrgo technology traces back to technology developed by Mark Krosney, Co-Founder and Chief Scientific Officer, a highly-accomplished scientist and formerly one of the lead engineers of B/E Aerospace. The technology was originally intended to address commercial aircraft cabin air quality applications. However, Amin J. Khoury, the Founder and formerly the Chairman and Chief Executive Officer of B/E Aerospace, recognized the commercial potential of this technology for the healthcare market, after discussions with Dr. David Helfet, Co-Founder and the Director Emeritus of the Orthopedic Trauma Service at both the Hospital for Special Surgery and the New York-Presbyterian Hospital, regarding the critical challenge to patients and hospitals posed by HAIs. Dr. Khoury subsequently led an "angel" investment group in funding the Company up to our IPO, in particular to provide for rigorous design and development of Pūrgo in a manner conforming to demanding regulatory requirements and the development of substantial intellectual property.

Dr. Khoury and Dr. Helfet are long-time colleagues who developed a strong business relationship during their respective 26- and 10-year service on the board of directors of Synthes, Inc., a company with $4 billion of annual revenue and the world's leading manufacturer and marketer of orthopedic trauma implants. In 2011, Dr. Khoury, at the request of Hansjörg Wyss, Chief Executive Officer of Synthes, led an effort to sell Synthes. In 2012, Synthes successfully merged with Johnson & Johnson's DePuy franchise in a $21 billion transaction.

To date, our team was formed through the utilization of highly qualified independent contractors and executives, including scientists, engineers, sales and marketing resources and others with expertise in electrical, mechanical and software engineering, computer science and regulatory matters, as well as experience in the healthcare and medical device industries. We have used consultants and other contract personnel for product development and engineering projects as well as for outsourced manufacturing to leverage industry and subject matter experts as well as to manage the Company's fixed cost structure.

We believe the team AeroClean Technologies has assembled, in addition to its differentiated technology and product offering, positions the Company to establish itself as the category leader and industry consolidator in premium air purification solutions for rooms, elevators and transportation systems.

Dr. Khoury and his team, with an established track record and experience from B/E Aerospace in penetrating and ultimately becoming the industry leader for a comprehensive array of commercial aircraft cabin interior components in the face of multiple incumbent competitors, informs AeroClean Technologies' approach to the air purification market, which we believe is currently populated by a number of small companies with technology that relies predominantly on traditional filtration devices.

In 2014, Messrs. Khoury, McCaffrey and Senft, all current members of the AeroClean Board, led an effort to separate B/E Aerospace into two distinct public companies, one an aerospace manufacturing business and the other an aviation distribution business. In 2017, the team sold the manufacturing business to Rockwell Collins in an $8.6 billion transaction representing a 14x EBITDA multiple and, in 2018, sold the distribution business to The Boeing Company for $4.25 billion, representing a 15.7x EBITDA multiple.

Leveraging Engineering, Manufacturing and Regulatory Expertise

In developing our patents and related intellectual property into commercial devices that will meet the exacting standards of medical device regulators, while at the same time creating a competitive advantage in our target markets, AeroClean Technologies has chosen to partner with leading companies with both engineering and FDA regulatory expertise as well as FDA regulated contract manufacturers. Utilization of the leading companies in their fields has allowed AeroClean Technologies to dramatically shorten the time-to-market of our Pūrgo device (our first marketable device), while also taking advantage of best-in-class engineering, regulatory expertise and assembly of our first commercial units without having to invest the substantial sums that would be required to establish all these capabilities in-house. The exacting standards embedded in our Pūrgo device are expected to deliver market leading performance in air purification with true competitive differentiation and which has supported final FDA 510(k) clearance for utilization in healthcare and other target markets where performance must be validated by certified independent laboratories.

Our in-house team, leveraging these organizations, has developed what we believe to be the lightest weight, most compact, powerful and cost-effective pathogen elimination device for our target markets.

AeroClean Technologies contracted with IPS, a leading medical and technology device engineering group, in developing the device configuration, which would optimize the performance and reliability of our patented UV-LED and SteriDuct technology. With over 100 designers and engineers who specialize in commercializing highly exacting applications of new technology, a dedicated IPS team has worked continuously with us to design, develop, test and source the components for the commercial production of the Pūrgo device. This is particularly true of electronics design and software engineering as well as product industrial design.

To manufacture our first Pūrgo device, AeroClean Technologies has engaged Mack Molding, a leading contract manufacturer of medical devices, which also has experience manufacturing devices for the transportation, energy/environment, defense/aerospace and consumer markets. AeroClean Technologies has also engaged MethodSense, Inc. ("MethodSense"), a regulatory affairs and quality assurance consulting firm, to reduce time to market and move our Pūrgo device successfully through the FDA regulatory process. MethodSense is a global medical device consultancy and software developer with over 21 years of deep industry experience, proven processes and modern technology focused on the commercial success of medical device companies.

Our Value Proposition

While there are numerous air filtration devices currently on the market, in addition to traditional filters fitted on HVAC systems primarily in hospitals, we believe the Pūrgo devices promise a step-change improvement in air treatment. By employing our patented UV-C LED and SteriDuct technology combined with three-stage filtration, our devices not only remove dust, spores, allergens and pathogens from the air but also eradicate essentially all types of airborne pathogens in occupied room airspaces and do so continuously. The process of upgrading HVAC systems in hospitals, schools, office buildings, commercial

spaces and others looking for air quality solutions can not only be costly, but it can also be disruptive as the core system is retrofitted or construction takes place to address high-risk areas throughout the building.

Further, HVAC systems do not always run continuously and cannot, in any event, continuously protect a room's occupants as compared to Pūrgo, which is continuously running and placed close to potential sources of cross-infection. Larger plug-and-play solutions are generally more costly and, we believe, less effective because they cannot always be placed closest to the occupants we are protecting. Our first Pūrgo device is of a size and price point ($3,250 manufacturer's suggested retail price (MSRP)) that allows customers to strategically place units for optimal reduction of occupants' exposure to airborne particles and pathogens. We believe the combination of technology, performance and price of the Pūrgo devices will deliver a singular value proposition that will make AeroClean Technologies a disruptor and consolidator in the professional air treatment market.

Our Technological Advantage

The foundation of our patented pathogen-killing technology is the utilization of solid-state light-emitting diodes ("LEDs") and the unique way we have deployed this LED technology through the development of our patented SteriDuct technology, which incorporates a proprietary geometry and reflective coating air induction and treatment process to safely deliver superior pathogen killing capability, while operating at lower power levels and with minimal air flow disruption. Our technology uses UV-emitting LEDs, which replaces conventional vacuum tube UV sources used in other competing UV devices — which are harmful to human beings and the environment and emit poisonous mercury gas when broken.

Studies of COVID-19 transmission have highlighted that, similar to seasonal flu viruses and other pathogens (such as severe acute respiratory syndrome, or "SARS," and Middle East respiratory syndrome, or "MERS"), COVID-19 is transmitted predominantly through contact between an infected person and others. To effectively limit this exposure, the air in the room that the infected person occupies must be continuously treated to remove the pathogens being transmitted into the air in the room. The Pūrgo device operates continuously, and the devices are able to be placed strategically within occupied rooms to treat the infected air closer to the source of the infectious material, rather than have the air pulled from the room through traditional filtering systems. Testing results confirmed that our device, powered by SteriDuct, was able to eradicate 99.99% ("4 Log") of airborne pathogens in less than 60 minutes, including a surrogate pathogen for COVID-19.

Our Target Markets

We believe our technology is adaptable and superior in the treatment of air and destruction of pathogens in any interior space. The market for our technology, therefore, is both large and global in nature — we estimate the total addressable market opportunity just within the U.S. healthcare market to be approximately $12 billion. Our proprietary patents and the validation of our first device, the compact, lightweight, powerful and cost-effective Pūrgo air purification device, will be important in establishing our brand and commercial footprint.

The markets we intend to focus on initially will be predominantly in the healthcare industry, as the inspiration for our technology was to address the high rate of HAIs acquired throughout hospitals, but particularly in surgeries and outpatient treatment areas with the highest population of immunocompromised patients. Moreover, the healthcare industry in the U.S. represents an approximately $12 billion market opportunity that will continue to be on the front lines of dealing with pathogens and, therefore, we expect will be receptive to technological advances that address the issue. We are acutely focused on the breadth of healthcare facilities that would benefit from utilization of Pūrgo and Pūrgo Lift devices, as well as our SteriDuct technology. In the U.S. alone, there are 6,090 hospitals, which have 208,500 on-site surgical facilities. In addition, these hospitals have 106,000 intensive care beds, predominantly each in their own room, and 825,000 non-ICU beds, usually configured with three beds per room. We have also assumed each hospital has 15 waiting rooms across both the general admittance and specialty practices within the facility and that each hospital has a minimum of seven elevators. As a result, in total, we estimate the approximate total market opportunity for the Pūrgo device within the U.S. hospital system to be $2.4 billion. For example, our largest customer in 2021, which made up 45% of revenues, was a hospital with a broad deployment of 100 units to address a variety of clinical and non-clinical spaces. While these individual customers may be

significant, and customers may purchase units over time to satisfy their needs, we believe that the transactional nature of the opportunities and the size of the addressable market mitigate a risk of concentration on an ongoing basis.

We believe the non-hospital medical market presents an equally compelling opportunity. There are approximately 209,000 medical offices in the U.S., as well as 9,280 non-hospital surgery centers containing 16,000 procedure rooms. We believe that most rooms could utilize a minimum of two Pūrgo devices to optimize room sanitization and disinfection, representing a market opportunity of approximately $4.3 billion.

Our third expected healthcare market opportunity is serving the long-term care and assisted living industry. We view this market as a natural extension of the first two areas, hospital and medical offices, which we will address in the first phase of our commercial launch. There are currently 60,000 long-term care and assisted living facilities in the U.S., and we believe, from a safety and fiduciary position, each facility should consider coverage of the common facilities, including dining rooms, activity rooms, therapy rooms and, importantly, reception areas and elevators, representing a market opportunity of approximately $5.1 billion, exclusive of elevators.

We believe adoption of the Pūrgo device in the healthcare environment will create substantial credibility and momentum that will provide us an opportunity to enter the university and K-12 school market. For example, on March 11, 2021, President Biden signed the $1.9 trillion coronavirus relief package, the American Rescue Plan, which included $130 billion to help schools reopen safely by reducing the probability of cross-infection — including for personal protective equipment, reducing class sizes and, importantly, improving ventilation. In a 2021 report on K-12 public school infrastructure, the American Society of Civil Engineers found that more than 40% of schools had HVAC systems in need of repair. Therefore, we believe that the K-12 school market represents a market opportunity of approximately $1 billion. We are engaging in activities with a goal of accessing the K-12 school market, including direct marketing to school administrators online and working with third-parties that specialize in marketing to K-12 schools. While our primary focus in 2022 has been establishing our commercial footprint within the healthcare markets as previously noted, we expect to see word-of-mouth driven demand from universities and schools as the year progresses. We estimate the total addressable market opportunity within the U.S. education and childcare markets (public and private K-12 schools, universities and colleges, preschool and daycare) to be approximately $9.7 billion.

Similarly, we believe emerging public awareness of the realities of airborne infections are focusing both tenants and landlords on the inadequacies of centralized HVAC systems for protecting occupants in individual rooms, in the instance when an infected person is also in the room and contagious. Only localized, continuous sanitizing of the air can reduce the risk of infection in these circumstances. We believe prophylactic placement of the Pūrgo devices in conference rooms, open work environments, cafeterias, lobbies and other communal spaces will substantially improve the air quality of these areas well beyond what is provided by central HVAC systems and thereby make it safe to return to and remain at work in multi-story office buildings. We estimate the total addressable market opportunity within the U.S. for elevator air purification to be approximately $5.0 billion.

Corporate Information

We were formed as Cleanco Bioscience Group LLC, a limited liability company in Florida, in September 2011 and effected a name change to AeroClean Technologies, LLC and conversion to a Delaware limited liability company in September 2020.

On November 29, 2021, we closed the IPO of 2,514,000 shares of common stock at a public offering price of $10.00 per share. The offering included the sale of 14,000 shares in connection with the partial exercise by the underwriters of their over-allotment option. The Benchmark Company, LLC, HCFP/Capital Markets LLC and Valuable Capital Limited acted as joint bookrunning managers for the offering. In November 2021, in connection with our IPO, we reorganized our corporate structure to become a Delaware corporation and all the Class A units of AeroClean Technologies, LLC converted into shares of AeroClean Technologies, Inc. common stock at a conversion ratio of 0.8462 shares of common stock for each Class A unit.

In June 2022, we sold an aggregate of 1,500,000 shares of common stock, and a warrant to purchase up to 1,500,000 shares of common stock, to the Selling Stockholder named herein for an aggregate purchase

price of $15,000,000. The warrant has an exercise price of $11.00 per share. Roth Capital Partners, LLC and The Benchmark Company, LLC acted as placement agents in connection with the Private Placement.

The address of our principal executive offices is 10455 Riverside Drive, Palm Beach Gardens, FL 33410. Our corporate website is www.aeroclean.com. The information contained on or that can be accessed through our website is not incorporated by reference into this prospectus and you should not consider information on our website to be part of this prospectus or in deciding whether to purchase shares of our common stock. We have included our website address in this prospectus solely as an inactive textual reference.

Risks Affecting Our Business

Our business is subject to numerous risks and uncertainties, including those highlighted in the section entitled "Risk Factors" immediately following this "Summary" section. These risks include, but are not limited to, the following:

- If Pūrgo fails to perform as expected, our ability to develop, market and sell our products could be harmed;
- If we cannot develop adequate distribution, customer service and technical support networks, or navigate applicable global logistics and supply chain bottlenecks, then we may not be able to market and distribute our products effectively or customers may decide not to order our products;
- We expect to incur future losses through the year ending December 31, 2022 and cannot be certain that our Company will become profitable;
- We may not be successful in implementing our proposed business strategy to achieve our expected revenue growth or effectively manage growth;
- We depend on sales of a single product for our future growth;
- We are subject to continuing regulation by the FDA, and if we fail to comply with regulations, including FDA and other state regulations, our business could suffer;
- Our products have not been proven to reduce the risk of COVID-19 transmission;
- We may face significant challenges in obtaining market acceptance of our products;
- We lack manufacturing experience and capabilities;
- Our success may depend on our ability to protect our intellectual property;
- We receive a significant portion of our revenues from a small number of customers and the loss of, or nonperformance by, one or more of our significant customers could adversely affect our business;
- Our ability to expand our product offerings and introduce additional products and services may be limited;
- Quality problems with, and product liability claims in connection with, our products could lead to recalls or safety alerts, harm to our reputation or adverse verdicts or costly settlements; and
- We have limited experience selling our products to healthcare facilities, and we might be unsuccessful in increasing our sales.

You should carefully consider all of the information set forth in this prospectus and, in particular, the information in the section entitled "Risk Factors" prior to making an investment in our common stock. These risks could, among other things, prevent us from successfully executing our strategies and could have a material adverse effect on our business, financial condition and results of operations.

The Offering	
Securities offered by the Selling Stockholder in the offering	1,500,000 shares of common stock (the "Shares") and 1,500,000 shares of common stock issuable upon the exercise of warrants (collectively with the Shares, the "Securities")
Common stock outstanding	15,408,828 shares of common stock as of July 8, 2022
Common stock outstanding assuming the exercise of all warrants issued in the Private Placement	16,908,828 shares of common stock
Use of proceeds	We will not receive any of the proceeds from the sale or other disposition of the shares being offered by the Selling Stockholder. However, upon the cash exercise of the warrant, we will receive the exercise price of such warrant, for an aggregate amount of $16.5 million if the warrant is exercised in full. Our management will have broad discretion as to the application of the proceeds generated from the exercise of the warrant. Our management may use the proceeds for corporate purposes that may not improve our financial condition or the market value of our common stock. The Company gained U.S. Food and Drug Administration (FDA) clearance to market and sell Pūrgo as a Class II Medical Device on June 1, 2022. The Company's strategy includes continuously evaluating a wide range of strategic opportunities including acquisitions. As part of that strategy, the Company is in discussions with several acquisition candidates and may use the proceeds of the warrant exercises, if any, together with other sources of capital, to effect transactions that the Company believes would substantially increase revenues, distribution and selling capability, and expand product lines, and, most importantly, add sensor and monitoring technology to enable the Company to effect its recurring revenue "Safe Air As a Service" model. The Company's goal is to provide actionable data to clients through the internet of things (IOT) to enable clients to provide Indoor Air Quality (IAQ) as part of their Indoor Environmental Quality (IEQ) initiatives. The Company currently has no material agreements or arrangements with any of the several acquisition candidates and there can be no assurance that any of these acquisitions, or any others, will be consummated.
Dividend policy	We have never declared or paid cash dividends on our common stock. We currently intend to retain any future earnings for use in the operation and expansion of our business. We do not expect to pay any dividends to holders of our common stock in the foreseeable future.

Plan of distribution	The Selling Stockholder may sell all or a portion of the shares of common stock beneficially owned by it and offered hereby from time to time directly or through one or more underwriters, brokers-dealers or agents. Registration of the common stock covered by this prospectus does not mean, however, that such shares necessarily will be offered or sold. See the section entitled "Plan of Distribution."
Lock-Up Agreements	In connection with our IPO, our officers, directors and pre-IPO shareholders entered into lock-up agreements in favor of the IPO underwriters in which they agreed (subject to certain exceptions) not to offer, sell or otherwise transfer any shares of common stock of the Company until the close of trading on November 29, 2022 (the "Lock-up Release Date"); provided, however, that our officers, directors and pre-IPO shareholders may be released from such lock-up agreements with the prior written consent of the IPO underwriters. In addition, in connection with the Private Placement, our officers, directors and holders of more than 5% of our outstanding shares of common stock entered into lock-up agreements in favor of the placement agents for the Private Placement in which they agreed (subject to certain exceptions) that each will not for the period commencing on June 26, 2022 through the close of trading on November 29, 2022 offer or sell any shares of common stock of the Company or securities convertible into or exchangeable or exercisable for shares of common stock of the Company. Our officers, directors and 5% shareholders may be released from such lock-up agreements with the prior written consent of the placement agents for the Private Placement.
Risk factors	An investment in our Company is highly speculative and involves a significant degree of risk. Prospective investors should carefully consider the section entitled "Risk Factors" beginning on page 16 before investing in our shares of common stock.
Listing	Our common stock is listed on Nasdaq under the symbol "AERC".

The number of shares of common stock to be outstanding after this offering is based on 15,408,828 shares of our common stock outstanding as of July 8, 2022 and assumes the outstanding warrant to purchase 1,500,000 shares of common stock is not exercised.

Summary Financial Data

The following table sets forth a summary of our historical financial data as of, and for the periods ended on, the dates indicated. The operating data for the years ended December 31, 2021 and 2020 and the balance sheet data as of December 31, 2021 and 2020 have been derived from our audited financial statements which are incorporated by reference in this prospectus. The operating data for the three months ended March 31, 2022 and 2021 and the balance sheet data as of March 31, 2022 have been derived from our unaudited condensed financial statements which are incorporated by reference in this prospectus. The unaudited condensed financial statements were prepared on the same basis as our audited financial statements. In our opinion, such financial statements include all adjustments, consisting of normal recurring adjustments, that we consider necessary for a fair presentation of the financial information for those periods. The summary financial data should be read in conjunction with the financial statements and the accompanying notes, which are incorporated by reference in this prospectus. In addition, the summary financial data should be read in conjunction with the section entitled "*Management's Discussion and Analysis of Financial Condition and Results of Operations*," also incorporated by reference in this prospectus.

	Three Months Ended March 31,		Year Ended December 31,	
	2022	2021	2021	2020
Operating Data:				
Operating expenses	$ 2,673,707	$ 1,969,692	$ 8,521,360	$ 3,323,081
Net loss	(2,577,964)	(1,969,692)	(7,923,607)	(3,323,081)

	As of March 31,	As of December 31,	
	2022	2021	2020
Balance Sheet Data:			
Cash	$17,774,097	$19,629,649	$2,333,117
Total assets	21,459,419	23,722,748	3,193,175
Total liabilities	1,656,130	2,012,333	665,308
Total members'/stockholders' equity	19,803,289	21,710,415	2,527,867

RISK FACTORS

Investing in our common stock involves a high degree of risk. You should consider carefully all of the material risks and uncertainties associated with our business as set forth below before making a decision to invest in our common stock. You should carefully consider the risks described below, as well as the other information included in or incorporated by reference into this prospectus, including our consolidated financial statements and the related notes and "Management's Discussion and Analysis of Financial Condition and Results of Operations," particularly before deciding whether to invest in our securities. The occurrence of any of the events or developments described below could materially and adversely affect our business, financial condition, results of operations and growth prospects. In such an event, the market price of our common stock could decline, and you may lose all or part of your investment. The risks described below are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also impair our business operations and adversely affect our results of operations and financial condition.

Risks associated with our business and industry

If Pūrgo fails to perform as expected, our ability to develop, market and sell our products could be harmed.

In the year ended December 31, 2021, we launched our first commercial air purification unit, Pūrgo, for in-room applications, and in February 2022, we debuted a Pūrgo Lift prototype, an air purification device for elevators and other wall-mount applications. The successful commercialization of these products is highly uncertain and subject to a number of risks. These risks include, but are not limited to: (i) the possibility that our products will be found to be less effective than anticipated or fail to receive necessary regulatory clearances; (ii) that the products, even if effective, will be difficult to scale up or manufacture at commercial levels or uneconomical to market; (iii) that proprietary rights of third parties will preclude us from using such technologies or marketing such products; and (iv) that third parties will use or market superior or equivalent technologies or products.

Our products may contain defects in design and manufacture that may cause them to not perform as expected or that may require repairs, recalls and design changes. We have a limited frame of reference from which to evaluate the long-term performance of Pūrgo and Pūrgo Lift. If these devices, or additional devices or applications of our technology that we may develop in the future, fail to perform as expected, customers may delay deliveries or terminate further orders and we may need to initiate product recalls, each of which could adversely affect our sales and brand and could adversely affect our business, financial condition and results of operations.

Our future success will depend on our ability to implement our business strategy and to develop and introduce, on a timely basis, products that address the evolving needs of our customers. If we are unable to develop, validate and scale the technology necessary to compete successfully with existing or newly emerging technologies, or if we are unable to develop products based on these technologies, our business, financial condition and results of operations could be seriously harmed.

If we cannot develop adequate distribution, customer service and technical support networks, or navigate applicable global logistics and supply chain bottlenecks, then we may not be able to market and distribute our products effectively or customers may decide not to order our products. In either case, our sales and revenues will suffer.

Our strategy requires us to distribute our products and provide a significant amount of customer service and maintenance. To provide these services, we have begun, and will need to continue, to develop a network of distribution and a staff of employees and independent contractors in each of the areas in which we intend to operate. We cannot assure that we will be able to organize and manage this network on a cost-effective basis, if at all. If we cannot effectively organize and manage this network, then it may be difficult for us to provide competitive service and support to our customers, in which case customers may be unable, or decide not, to order our products, which could have a material adverse effect on our business, financial condition and results of operations.

In addition, governmental mandates related to the COVID-19 pandemic — among other dynamics — have negatively impacted, and may continue to impact, personnel and operations at third party manufacturing

and component part supplier facilities in the United States and around the world, creating logistics and supply chain bottlenecks across many industries. These disruptions have adversely impacted the availability and cost of raw materials and component parts. For example, various electronic components and semi-conductor chips have become increasingly difficult to source, and when available, may be subject to substantially longer lead times and higher costs than historically applicable. While we have achieved improvements in our third-party manufacturing output since our commercial launch of Pūrgo at the end of the third quarter in 2021, we expect these ongoing global logistics and supply chain bottlenecks and component shortages may adversely impact our ability to source component parts at favorable prices (if at all) and may result in delays in, or reduced output from, our third-party manufacturing activities. Higher component costs and/or delays in our ability to manufacture and distribute Pūrgo and Pūrgo Lift could have a material adverse effect on our sales, revenues, and results of operations.

We expect to incur future losses through at least the year ending December 31, 2022 and cannot be certain that our Company will become profitable.

We have incurred operating losses each year since our inception and have only begun to recognize revenue starting in July 2021. These losses are expected to continue through at least the year ending December 31, 2022, notwithstanding that we have begun to generate revenue, because we plan to continue to make significant investments to develop and market our products and to establish our consumables and service business. We cannot be certain that we will ever achieve or sustain profitability. If we continue to incur operating losses for a period longer than expected, or in an amount greater than expected, we may be unable to continue our operations.

We may not be successful in implementing our proposed business strategy to achieve our expected revenue growth or effectively manage growth.

The Company began recognizing revenues as of July 2021. In the future, even if our revenues increase, our rate of growth may decline. In any event, we will not be able to grow as rapidly or at all if we do not:

- successfully establish our technology and brand;
- establish a commercial footprint;
- accelerate development of prototypes and market introduction of our devices and other novel applications of our proprietary SteriDuct technology;
- capitalize on our collaboration with experts in aerospace;
- explore opportunities for collaboration; or
- identify opportunities to establish industry leadership domestically and internationally.

We cannot assure you that we will be able to meet these objectives. As we grow, we expect to invest substantial financial and other resources to:

- expand into non-medical markets such as schools, long-term care facilities and the aviation and HVAC industries;
- support the development of a team of senior sales associates;
- accelerate our development of complementary devices; and
- incur general administration, including legal, accounting and other compliance, expenses related to being a public company.

Our planned growth will place significant demands on our management and on our operational and financial resources. We have hired and expect to continue hiring additional personnel to support our planned growth. Our organizational structure will become more complex as we add staff, and we will need to improve our operational, legal, financial and management controls as well as our reporting systems and procedures. We will require significant capital expenditures and the investment of valuable management resources to grow and develop in these areas. A failure to manage our growth effectively could materially and adversely affect

our ability to market our products, which could have a material adverse effect on our business, financial condition and results of operations.

We depend on sales of a single product for our future growth.

We are currently in the commercialization phase of our principal product, the Pūrgo device. We will depend for our growth on the success of this product. We cannot guarantee that our rollout of this product will be successful or that we will be able to increase sales of our Pūrgo device. In the year ended December 31, 2021, we generated sales of approximately $0.6 million of the Pūrgo device and, while we intend to promote sales of this product during 2022 and beyond, we cannot guarantee that we will succeed in these efforts. In addition, we may not be successful in developing or acquiring additional products. Any failure to expand sales of our Pūrgo device, or any failure to obtain market acceptance of our product, would have a material adverse effect on our business, financial condition, and results of operations.

We are subject to continuing regulation by the FDA, and if we fail to comply with regulations, including FDA and other state regulations, our business could suffer.

We and any contract manufacturers we engage with to produce our Pūrgo device are subject to FDA regulatory requirements, which include quality system regulations related to the manufacture of our devices, labeling regulations and medical device reporting ("MDR") regulations. The MDR regulations require us to report to the FDA if we become aware of information that reasonably suggests the Pūrgo device may have caused or contributed to a death or serious injury, or has malfunctioned and the device or a similar device we market would likely cause or contribute to a death or serious injury if the malfunction were to recur. We must report corrections and removals to the FDA where the correction or removal was initiated to reduce a risk to health posed by the Pūrgo device or to remedy a violation of the Federal Food, Drug, and Cosmetic Act (the "FDCA") caused by the device that may present a risk to health, and maintain records of other corrections or removals.

The manufacturing process for a medical device like Pūrgo is subject to FDA regulations. Suppliers and manufacturers must meet applicable manufacturing requirements and undergo rigorous facility and process validation tests required by regulatory authorities in order to comply with regulatory standards, such as FDA's quality system regulations. Although our agreements with our contract manufacturers require them to perform according to FDA quality system requirements, any of our suppliers or manufacturers could fail to comply with such requirements or to perform their obligations to us in relation to quality or otherwise. Under these circumstances, we may choose or be forced to enter into an agreement with another third-party manufacturer, which we may not be able to do on reasonable terms, if at all. If we are required to change manufacturers for any reason, we must verify that the new manufacturer maintains facilities and procedures that comply with applicable quality standards and regulations. The delays associated with the qualification of a new contract manufacturer could negatively affect our ability to produce our products in a timely manner or within budget.

The FDA regulates promotion, advertising and claims made with respect to FDA-regulated medical devices, including Pūrgo. Failure to comply with these requirements can result in, among other things, adverse publicity, warning letters, corrective advertising and potential civil and criminal penalties.

The FDA and state authorities have broad enforcement powers. We and our contract manufacturers are subject to ongoing inspection by regulatory authorities from time to time. Our or our contract manufacturer's failure to comply with applicable regulatory requirements could result in enforcement actions by the FDA or state agencies, which may include any of the following sanctions:

- untitled letters, warning letters, fines, injunctions, consent decrees and civil penalties;
- recall, termination of distribution, administrative detention, injunction or seizure of our Pūrgo device;
- customer notifications or repair, replacement or refunds;
- operating restrictions or partial suspension or total shutdown of production;
- refusing or delaying our requests for modifications to the Pūrgo device;

- withdrawing or suspending clearance that has already been granted;
- FDA refusal to issue certificates to foreign governments needed to export products for sale in other countries; and
- criminal prosecution.

Any corrective action, whether voluntary or involuntary, as well as potentially defending ourselves in a lawsuit, will require the dedication of our time and capital, distract management from operating our business and may harm our reputation and financial results.

Digital marketing and social media efforts may expose us to additional regulatory scrutiny, including from the Federal Trade Commission (the "FTC") and other consumer protection agencies and regulators.

In addition to the laws and regulations enforced by the FDA, advertising for various services and for non-restricted medical devices is subject to federal truth-in-advertising laws enforced by the FTC, as well as comparable state consumer protection laws. Our efforts to promote medical device products via social media initiatives may subject us to additional scrutiny of our practices. For example, the FTC and other consumer protection agencies scrutinize all forms of advertising (whether in digital or traditional formats) for business services, consumer-directed products, and non-restricted medical devices to ensure that advertisers are not making false, misleading or unsubstantiated claims or failing to disclose material relationships between the advertiser and its products' endorsers, among other potential issues. The FDA oversees the advertising and promotional labeling for restricted medical devices and ensures, among other things, that there is effective communication of, and a fair and balanced presentation of, the risks and benefits of such high-risk medical devices.

Under the Federal Trade Commission Act ("FTC Act"), the FTC is empowered, among other things, to (a) prevent unfair methods of competition and unfair or deceptive acts or practices in or affecting commerce; (b) seek monetary redress and other relief for conduct injurious to consumers; and (c) gather and compile information and conduct investigations relating to the organization, business, practices, and management of entities engaged in commerce. The FTC has very broad enforcement authority, and failure to abide by the substantive requirements of the FTC Act and other consumer protection laws can result in administrative or judicial penalties, including injunctions affecting the manner in which we would be able to market our products in the future, or criminal prosecution. We plan to increase our advertising activities that may be subject to these federal and state truth-in-advertising laws. Any actual or perceived non-compliance with those laws could lead to an investigation by the FTC or a comparable state agency, or could lead to allegations of misleading advertising by private plaintiffs. Any such action against us could disrupt our business operations, cause damage to our reputation, and result in a material adverse effect on our business.

Our products have not been proven to reduce the risk of COVID-19 transmission.

We expect that much of the demand for our products will be based not only on their ability to reduce exposure of immunocompromised patients to airborne organisms that cause HAIs but also reduce the risk of COVID-19 transmission. Since the beginning of the COVID-19 pandemic, we have learned that the original SARS-CoV-2 strain can mutate rapidly, and these mutant strains, such as the Delta and Omicron variants, continue to spread throughout the global population. Accordingly, much is still unknown about the manner in which bacteria and viruses, including the novel coronavirus underlying COVID-19, and any mutation or variation thereof, are transmitted among human beings. Current studies have highlighted that COVID-19, like seasonal flu viruses and other pathogens (such as SARS and MERS), is transmitted by air predominantly through contact between an infected person and others. While we have proven that our devices can eliminate 99.99% ("4 Log") of airborne pathogens in controlled laboratory environments, including a pathogen that is a surrogate for COVID-19, we have not conducted any tests or studies regarding the ability of such devices to reduce the spread of COVID-19 and any mutation or variation thereof, and our devices may ultimately not succeed in reducing the spread of COVID-19 or any mutation or variation thereof. Further, additional research may determine that COVID-19 is transmitted among human beings in other ways not known or fully understood. We expect demand for our products would be significantly less than anticipated if our products are not perceived as being effective at reducing the risk of COVID-19 transmission or if COVID-19 is determined to spread in ways other than through airborne transmission.

We may face significant challenges in obtaining market acceptance of our products, which could adversely affect our potential sales and revenues.

We do not yet have an established market or customer base for our products. Acceptance of our products in the marketplace by both potential users and potential purchasers, including hospitals, schools, universities, commercial facilities, transportation systems and other healthcare and non-healthcare providers, is uncertain, and our failure to achieve sufficient market acceptance will significantly limit our ability to generate revenue and be profitable. Market acceptance will require substantial marketing efforts and the expenditure of significant funds by us to inform hospitals, schools, universities, commercial facilities, transportation systems, residential spaces and other health care and non-healthcare providers of the benefits of using our products. We may encounter significant clinical and market resistance to our products, and our products may never achieve market acceptance. We may not be able to build key relationships with physicians, education administrators and government agencies. Product orders may be cancelled or customers that are beginning to use our products may cease to do so and customers expected to begin using our products may not.

Factors that may affect our ability to achieve acceptance of our products in the marketplace include, but are not limited, to whether:

- such products will be effective;
- such products will be cost-effective; and
- we will be able to demonstrate product safety, efficacy and cost-effectiveness.

Acceptance of our products in the marketplace is also uncertain, and our failure to achieve sufficient market acceptance and any inability to sell such products at competitive prices will limit our ability to generate revenue and be profitable. Our products and technologies may not achieve expected reliability, performance and endurance standards. Our products and technologies may also not achieve market acceptance, including among hospitals, or may not be deemed suitable for other commercial applications.

We lack manufacturing experience and capabilities.

We do not have our own manufacturing facilities or capabilities. We have engaged Mack Molding, an FDA-regulated subsidiary of the privately held Mack Group, to manufacture the Pūrgo device. Although Mack Molding is an experienced contract manufacturer of medical devices, there can be no assurance that Mack Molding will be able to continue to manufacture our products successfully, including in a manner that complies with regulatory requirements, or at a scale to meet customer demand. There also can be no assurance that we would be able to secure another manufacturer for our products or do so on terms similar to those with Mack Molding. The inability to have our products manufactured in a timely manner could have a material adverse effect on our business, financial condition and results of operations.

We receive a significant portion of our revenues from a small number of customers and the loss of, or nonperformance by, one or more of our significant customers could adversely affect our business.

During the year ended December 31, 2021, our largest and second largest customers accounted for approximately 45% and 12% of the Company's revenues, respectively. Our largest customer in the 2021 fiscal year was a hospital deploying 100 units to address a variety of clinical and non-clinical spaces. As we roll out the Pūrgo device to a wider group of potential customers, we expect our largest customers may vary from period to period. However, as we continue to market our products and seek to develop and grow our customer base, our revenues and results of operations in any given period going forward may materially rely on one or a few significant customers. The failure of such customer or customers to fulfill their obligations under purchase commitments could result in a material reduction in our reported revenues and results of operations.

Our success may depend on our ability to protect our intellectual property.

Our success may depend on our ability to obtain and maintain patent and trade secret protection. We rely on patents and scientific know-how to protect a significant part of our intellectual property and competitive position. Our patents may not afford meaningful protection for our technologies and products.

Some of our patent filings are in an early phase and may not be issued. Further, with respect to our existing patents and any future patents that may be issued, there can be no assurance that the issued claims will provide any significant protection against competitive products or otherwise be valuable commercially. Our competitors may develop technologies and products similar to our technologies and products that do not infringe upon our patents. Legal standards relating to the validity of patents and the proper scope of their claims, including in the medical device field, are still evolving, and there is uncertainty regarding the breadth of claims in medical device patents or the effect of prior art on them.

We also rely on trade secrets to protect our technologies. However, trade secrets are difficult to protect. We require all of our employees to sign agreements that prohibit the improper use of our trade secrets or the disclosure of such to others, but we may be unable to determine if our employees have complied or will comply with their legal obligations under these agreements. We also require collaborators and consultants to enter into confidentiality agreements, but we may not be able to adequately protect our trade secrets or other proprietary information in the event of any unauthorized use or disclosure or the lawful development by others of this information. Many of our employees and consultants were, and many of our consultants may currently be, parties to confidentiality agreements with other companies, and the use of our technologies could violate these agreements. In addition, third parties may independently discover our trade secrets or proprietary information.

To date, we have primarily used consultants and other contract personnel for product development and engineering, as well as for outsourced manufacturing expertise. While we believe the contracts underlying these relationships adequately provide for the protection of our patents and trade secrets, the use of such third-party contracts heightens the risk of unauthorized use or theft of our intellectual property. If we are not able to obtain adequate patent protection, enforce our intellectual property rights and/or protect our trade secrets, our ability to prevent competitors from making, using and selling competing products will be limited, which could have a material adverse effect on our business, financial condition or results of operations.

Our ability to expand our product offerings and introduce additional products and services may be limited, which could have a material adverse effect on our business, financial condition and results of operations.

In July 2021, we completed the development stage of our first commercial air purification unit, Pūrgo, for in-room applications and began commercial production and sales, and in February 2022, we debuted a prototype of Pūrgo Lift, an air purification device for elevators and other wall-mount applications. There can be no assurance that we will be successful in commercializing the Pūrgo or Pūrgo Lift devices or developing any other products or applications of our proprietary technology or that demand will develop for such in the future. Entry into new markets may require us to compete with new companies, cater to customer expectations and comply with new complex regulations, which may be unfamiliar. Accordingly, we could need to invest significant resources in market research, legal counsel and our organizational infrastructure, and a return on such investments may not be achieved for several years, if at all. Additionally, failure to comply with applicable regulations or to obtain required licenses could result in penalties or fines. Further, we may fail in demonstrating the value of any new value-added product to customers, which would compromise our ability to successfully create new revenue streams or receive returns in excess of investments. Any of these risks, if realized, could materially and adversely affect our business, financial condition and results of operations.

Quality problems with, and product liability claims in connection with, our products could lead to recalls or safety alerts, harm to our reputation, or adverse verdicts or costly settlements, and could have a material adverse effect on our business, financial condition and results of operations.

Quality is extremely important to us and our customers due to the serious and costly consequences of product failure, and our business exposes us to potential product liability risks that are inherent in the design, manufacture and marketing of medical devices and services. In addition, our products may be used in intensive care settings with immunocompromised and seriously ill patients. Component failures, manufacturing defects or design flaws could result in an unsafe condition or injury to, or death of, a patient or other user of our products. These problems could lead to the recall of, or issuance of a safety alert relating to, our products and could result in unfavorable judicial decisions or settlements arising out of product liability claims and lawsuits, including class actions, which could negatively affect our business,

financial condition and results of operations. In particular, a material adverse event involving one of our products could result in reduced market acceptance and demand for all products offered under our brand and could harm our reputation and ability to market products in the future.

High quality products are critical to the success of our business. If we fail to meet the high standards we set for ourselves and that our customers expect, and if our products are the subject of recalls, safety alerts or other material adverse events, our reputation could be damaged, we could lose customers and our revenue could decline.

Any product liability claim brought against us, with or without merit, could be costly to defend and resolve. Any of the foregoing problems, including product liability claims or product recalls in the future, regardless of their ultimate outcome, could harm our reputation and have a material adverse effect on our business, financial condition and results of operations.

We have limited experience selling our products to healthcare facilities, and we might be unsuccessful in increasing our sales.

Our business strategy depends largely on our ability to sell our products to hospitals and other healthcare facilities. We have limited experience with respect to sales and marketing, and in particular marketing to hospitals and healthcare facilities. If we are unsuccessful at manufacturing, marketing and selling our products, our business, financial condition and results of operations will be materially adversely affected.

Our results of operations could be negatively impacted if we are unable to capitalize on research and development spending.

We have and intend to continue to spend a significant amount of time and resources on research and development projects in order to develop and validate new and innovative products. We believe these projects will result in the commercialization of new products and will create additional future sales. However, factors including regulatory delays, safety concerns or patent disputes could delay the introduction or marketing of new products. We may experience an unfavorable impact on our business and financial condition if we are unable to capitalize on those efforts to successfully market new products.

Our success will depend partly on our ability to operate without infringing or misappropriating the proprietary rights of others.

We may be sued for infringing or misappropriating the proprietary rights of others. We may have to pay substantial damages, including treble damages, for past infringement if it is ultimately determined that our products or technology infringe a third party's proprietary rights. Other companies may have filed patent applications on concepts similar to the concepts underlying our technologies and products. In addition, patents may be issued covering UV-C LED technology or other technologies or methods of air purification that could prevent us from developing our technologies or products, or that relate to certain other aspects of technology that we utilize or expect to utilize.

From time to time, we may receive invitations from third parties to license patents owned or controlled by such parties. We will evaluate these requests and may consider obtaining licenses that are compatible with our business objectives. However, we may not be able to obtain licenses on acceptable terms, if at all.

Our inability to operate without infringing upon the proprietary rights of others or a failure to obtain or maintain any necessary licenses could have a material adverse effect on our business, financial condition or results of operations.

We may collaborate with third parties to help develop certain technologies.

We may seek out collaboration opportunities to extend our UV-C LED air purification technology to the integrated air handling systems of large buildings, elevators and commercial aircraft. During the year ended December 31, 2021, we accelerated our development of air purification equipment utilizing our proprietary, patented SteriDuct technology for elevators in the Pūrgo Lift unit, and we have engaged a veteran of the elevator industry to continue to develop that product. We also may create strategic alliances with aviation industry suppliers to provide both ground-based and in-flight air purification systems. There can

be no assurances that we will enter into any such collaborations or that they will be successful. If our collaborations are not successful, it may impact our ability to develop new technologies and products, which could adversely impact our business, financial condition and results of operations. Further, such collaborations may introduce additional risk with respect to possible unauthorized use or infringement upon our intellectual property rights by the third-parties with whom, if any, we ultimately engage in strategic collaborations.

Significant additional governmental regulation could subject us to unanticipated delays, which would adversely affect our sales and revenues.

Our business strategy depends in part on our ability to get our products into the market as quickly as possible. Additional laws and regulations, or changes to existing laws and regulations that are applicable to our business, may be enacted or promulgated, and the interpretation, application or enforcement of existing laws and regulations may change. We cannot predict the nature of any future laws, regulations, interpretations, applications or enforcement or the specific effects any of these might have on our business.

Any future laws, regulations, interpretations, applications or enforcement could delay or prevent regulatory clearance of our products and our ability to market our products. Moreover, changes that result in our failure to comply with the requirements of applicable laws and regulations could result in the types of enforcement actions by the FDA or other agencies as described above, all of which could impair our ability to have manufactured and to sell the affected products.

Risks associated with our common stock

Our executive officers, directors and principal stockholders have the ability to control all matters submitted to stockholders for approval.

The Company's executive officers, directors and stockholders who owned 5% or more of our outstanding shares of common stock prior to the completion of our IPO currently beneficially own shares, in the aggregate, representing approximately 52.7% of the shares of our outstanding common stock as of July 1, 2022. As a result, if these stockholders were to choose to act together, they would be able to control all matters submitted to our stockholders for approval, as well as our management and affairs. For example, these persons, if they choose to act collectively, would control the election of directors and approval of any charter amendment, merger, consolidation or sale of all or substantially all of our assets. These stockholders could cause the Company to take actions that these stockholders believe to be in their best interests but with which the remainder of our stockholders disagree. For example, they could cause the Company to enter into mergers with companies that operate in different businesses, or they could elect to cause the Company to sell all or substantially all of its assets. This concentration of voting power could delay or prevent an acquisition of the Company on terms that other stockholders may desire.

While our common stock is listed on Nasdaq, if we do not meet Nasdaq's continuing listing requirements we could be delisted and there can be no assurance that an active and liquid public market will fully develop or be sustained.

Our common stock is listed on Nasdaq. Notwithstanding such listing, there can be no assurance that an active or liquid public market will fully develop or be sustained. In addition, if we do not meet Nasdaq's continuing listing requirements, including Nasdaq requirements related to maintenance of a minimum stock price, the aggregate market value of our common stock, and the number of public holders of our common stock, we could be delisted by Nasdaq. In the absence of an active or liquid public market:

- investors may have difficulty buying and selling or obtaining market quotations;
- market visibility for our securities may be limited; and
- a lack of visibility for our securities may have a depressive effect on any market price for our securities.

Moreover, there can be no assurance that securities analysts of brokerage firms will provide coverage of the Company, if at all. In the event there is no active or liquid public market for our common stock or coverage

of the Company by securities analysts of brokerage firms, you may be unable to dispose of your common stock at desirable prices or at all. Moreover, there is a risk that our common stock could be delisted from Nasdaq or any other trading market on which it may be listed or quoted.

The lack of an active trading or liquid public market may impair our ability to raise capital to continue to fund operations by selling securities and may impair our ability to use our securities as consideration for future acquisitions.

The price of our shares of common stock in the future may be volatile.

The market price of our common stock has been and will likely continue to be volatile and has and could in the future fluctuate widely in price in response to various factors, many of which are beyond our control, including, but not limited to:

- technological innovations or new products and services by us or our competitors;
- additions or departures of key personnel;
- sales of shares of our common stock;
- our ability to integrate operations, technology, products and services;
- our ability to execute our business plan;
- results of operations below expectations;
- loss of any strategic relationship (including, in particular, our relationship with the third-party manufacturer we use to produce the Pūrgo device);
- industry developments;
- regulatory developments, including with respect to FDA rules and regulations;
- general economic, industry and other external factors; and
- period-to-period fluctuations in our financial results.

Any of these factors could have a significant and adverse impact on the market price of our common stock. Because we have a limited operating history and a very limited history of generating revenue, you may consider any one of these factors to be material. Our stock price may fluctuate widely as a result of any of the above factors. In addition, the securities markets have from time to time experienced significant price and volume fluctuations, extreme volatility or rapid declines that are unrelated or disproportionate to the operating performance of particular companies. These market fluctuations may also materially and adversely affect the market price of our common stock, regardless of our actual operating performance.

If our shares become subject to the SEC's penny stock rules, broker-dealers may experience difficulty in completing customer transactions, and trading activity in our shares may be adversely affected.

If we fail to meet certain criteria specified in the federal securities laws, including with respect to our reported net tangible assets, transactions in our shares may become subject to the "penny stock" rules promulgated under the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Under these rules, broker-dealers who recommend such shares to persons other than institutional accredited investors must:

- make a special written suitability determination for the purchaser;
- receive the purchaser's written agreement to the transaction prior to sale;
- provide the purchaser with risk disclosure documents that identify certain risks associated with investing in "penny stocks" and that describe the market for these "penny stocks" as well as a purchaser's legal remedies; and
- obtain a signed and dated acknowledgment from the purchaser demonstrating that the purchaser has actually received the required risk disclosure document before a transaction in a "penny stock" can be completed.

If our shares become subject to these rules, broker-dealers may find it difficult to effectuate customer transactions, and trading activity in our shares may be adversely affected. As a result, the market price of our shares may be depressed, and you may find it more difficult to sell our shares. We believe that we are currently not subject to the "penny stock" rules, but that could change in the future.

We have never declared dividends and do not intend to.

We have never declared or paid dividends on our equity securities and do not anticipate paying any cash dividends in the foreseeable future. We currently intend to retain future earnings, if any, to fund the development and growth of our business. Any future determination to pay dividends will be at the discretion of our Board and will be dependent upon our financial condition, results of operations, capital requirements, applicable contractual restrictions and such other factors as we may deem relevant.

We are an "emerging growth company" under the JOBS Act and we cannot be certain if the reduced disclosure requirements applicable to emerging growth companies will make our common stock less attractive to investors.

We are an "emerging growth company," as defined in the Jumpstart Our Business Startups Act of 2012 (the "JOBS Act"), and we may take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not "emerging growth companies," including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements and exemptions from the requirements of holding a non-binding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. We cannot predict if investors will find our common stock less attractive because we may rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock, and our stock price may be more volatile.

In addition, Section 107 of the JOBS Act also provides that an "emerging growth company" can take advantage of the extended transition period provided in Section 7(a)(2)(B) of the Securities Act of 1933, as amended (the "Securities Act"), for complying with new or revised accounting standards. In other words, an "emerging growth company" can delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We are choosing to take advantage of the extended transition period for complying with new or revised accounting standards.

We will remain an "emerging growth company" for up to five years, although we will lose that status sooner if our revenue exceeds $1.07 billion, if we issue more than $1.0 billion in non-convertible debt in a three- year period or if the market value of our common stock that is held by non-affiliates exceeds $700 million as of June 30 of any year.

Our status as an "emerging growth company" under the JOBS Act may make it more difficult to raise capital as and when we need it.

Because of the exemptions from various reporting requirements provided to us as an "emerging growth company" and because we will have an extended transition period for complying with new or revised financial accounting standards, we may be less attractive to investors, and it may be difficult for us to raise additional capital as and when we need it. Investors may be unable to compare our business with other companies in our industry if they believe that our financial accounting is not as transparent as other companies in our industry. Any inability to raise additional capital as and when we need it could have a material adverse effect on our business, financial condition, results of operations, liquidity and prospects.

All of the Company's stockholders who acquired their shares of common stock prior to our IPO, and all of the Company's executive officers, directors and 5% shareholders, are subject to a lock-up which expires on November 29, 2022. The expiration of the lock-up, or any release of the lockup, which would result in some or all of these shares becoming eligible for future sale, may have an adverse effect on the market price of our shares.

In connection with the Company's IPO, the Company's officers, directors and pre-IPO shareholders entered into lock-up agreements in favor of the IPO underwriters in which they agreed (subject to certain exceptions) not to offer, sell or otherwise transfer any shares of common stock of the Company until the close

of trading on November 29, 2022; provided, however, that our officers, directors and pre-IPO shareholders may be released from such lock-up agreements with the prior written consent of the IPO underwriters.

In addition, in connection with the Private Placement, the Company's officers, directors and holders of more than 5% of our outstanding shares of common stock entered into lock-up agreements in favor of the placement agents for the Private Placement in which they agreed (subject to certain exceptions) that each will not for the period commencing on June 26, 2022 through the close of trading on November 29, 2022 offer or sell any shares of common stock of the Company or securities convertible into or exchangeable or exercisable for shares of common stock of the Company. Our officers, directors and 5% shareholders may be released from such lock-up agreements with the prior written consent of the placement agents for the Private Placement.

Any sale, or the prospect of any such sale, in the future of such shares could have an adverse effect on the future market price for our shares or on our ability to obtain future financing. Any of the foregoing may have a depressive effect on the price of our shares. Additionally, any release of these lock-up agreements or lock-up arrangements, or the prospect of any such release, may also place downward pressure on the price of our shares.

We have and expect to continue to incur significant increased costs as a result of operating as a public company, and our management is now required to devote substantial time to new compliance initiatives.

As a public company, we incur significant legal, accounting and other expenses that we did not incur as a private company. We are subject to reporting requirements under the Exchange Act, the other rules and regulations of the SEC, and the rules and regulations of Nasdaq.

The expenses required to adequately report as a public company are material, and compliance with the various reporting and other requirements applicable to public companies requires considerable time and attention of management. For example, the Sarbanes-Oxley Act and the rules of the SEC and national securities exchanges impose various requirements on public companies, including requiring the establishment and maintenance of effective disclosure and internal controls. Our management and other personnel need to devote a substantial amount of time to these compliance initiatives. These rules and regulations have and will continue to increase our legal and financial compliance costs and have and will continue to make some activities more time consuming and costly. For example, we expect these rules and regulations will make it more difficult and more expensive for us to obtain director and officer liability insurance, and we may be required to accept reduced policy limits on coverage or incur substantial costs to maintain the same or similar coverage. The impact of these events could also make it more difficult for us to attract and retain qualified personnel to serve on our Board, our Board committees or as executive officers.

If we fail to implement and maintain an effective system of internal control to remediate our material weakness over financial reporting, we may be unable to accurately report our results of operations, meet our reporting obligations as a public company or prevent fraud, and investor confidence and the trading prices of our securities may be materially and adversely affected.

Prior to the completion of our IPO, the Company had limited accounting personnel and other resources to address internal controls over financial reporting. In connection with the audits of our financial statements as of December 31, 2021 and 2020 and for the two years ended December 31, 2021 and 2020, we identified a material weakness in our internal control over financial reporting. As defined in the standards established by the Public Company Accounting Oversight Board (the "PCAOB"), a "material weakness" is a deficiency, or combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the annual or interim financial statements will not be prevented or detected on a timely basis.

Management identified the following deficiencies, which in the aggregate are material weaknesses, in its assessment of the effectiveness of internal control over financial reporting as of December 31, 2021. Management noted we do not have sufficient segregation of duties within the accounting function, a lack of timely reconciliation of accounts and review of the Company's financial statements at each reporting period, a lack of appropriate contemporaneous documentation and/or valuation for certain equity transactions and execution of significant agreements containing inaccurate terms and errors.

We are in the process of implementing a number of measures to address this material weakness. However, we cannot assure you that these measures will fully address the material weakness and deficiencies in our internal control over financial reporting or that we may conclude that they have been fully remediated.

We are subject to the Sarbanes-Oxley Act of 2002, and specifically to Section 404 thereof, which will require that we include a certification from management on the effectiveness of our internal controls in our annual reports on Form 10-K, beginning with the Form 10-K filed for the year ending December 31, 2022. In addition, once we cease to be either an "emerging growth company" as such term is defined in the JOBS Act or a non-accelerated filer in accordance with Rule 12b-2 under the Exchange Act, our independent registered public accounting firm must attest to and report on the effectiveness of our internal control over financial reporting. Moreover, even if our management concludes that our internal control over financial reporting is effective, our independent registered public accounting firm, after conducting its own independent testing, may issue a report that is qualified if it is not satisfied with our internal controls or the level at which our controls are documented, designed, operated or reviewed, or if it interprets the relevant requirements differently from us. In addition, our continuing reporting obligations have and may continue to place a significant strain on our management, operational and financial resources and systems. We may be unable to complete our evaluation testing and any required remediation on a timely basis or at all.

During the course of documenting and testing our internal control procedures, in order to satisfy the requirements of Section 404, we may identify other weaknesses and deficiencies in our internal control over financial reporting. If we fail to maintain the adequacy of our internal control over financial reporting, as these standards are modified, supplemented or audited from time to time, we may not be able to conclude on an ongoing basis that we have effective internal control over financial reporting in accordance with Section 404. Generally speaking, if we fail to achieve and maintain an effective internal control environment, it could result in material misstatements in our financial statements and could also impair our ability to comply with applicable financial reporting requirements and related regulatory filings on a timely basis. As a result, our reputation, business, financial condition and results of operations may be materially and adversely affected. Additionally, ineffective internal control over financial reporting could expose us to increased risk of fraud or misuse of corporate assets and subject us to potential delisting from Nasdaq, regulatory investigations and civil or criminal sanctions. We may also be required to restate our financial statements from prior periods.

Financial Industry Regulatory Authority sales practice requirements may also limit your ability to buy and sell our common stock, which could depress the price of our shares.

Financial Industry Regulatory Authority ("FINRA") rules require broker-dealers to have reasonable grounds for believing that an investment is suitable for a customer before recommending that investment to the customer. Prior to recommending speculative low-priced securities to their non-institutional customers, broker-dealers must make reasonable efforts to obtain information about the customer's financial status, tax status and investment objectives, among other things. Under interpretations of these rules, FINRA believes that there is a high probability such speculative low-priced securities will not be suitable for at least some customers. Thus, FINRA requirements make it more difficult for broker-dealers to recommend that their customers buy our common stock, which may limit your ability to buy and sell our shares once publicly traded, have an adverse effect on the market for our common stock and thereby depress our share price.

The forward-looking statements contained in this prospectus are subject to several known and unknown risks that could have a material impact on our performance.

This prospectus contains forward-looking statements, including statements regarding, among other items, our business strategies and anticipated demand for our products. These forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. These factors include, but are not limited to, risks related to our new and uncertain technology and business, the early stage of commercialization and development of our products, our limited operating history, competition, the uncertainty of obtaining regulatory clearance to market our products, the uncertainty of intellectual property protection and other risks discussed in this section as well as other factors referenced in this prospectus.

We may have to pay liquidated damages to the Selling Stockholder, which could increase our expenses and reduce our cash resources.

In connection with the Private Placement, we entered into a registration rights agreement (the "Registration Rights Agreement") with the Selling Stockholder. Under the terms of the registration rights agreement, subject to certain limited exceptions, if the registration statement of which this prospectus forms a part has not been declared effective within the time periods specified in the Registration Rights Agreement or we otherwise fail to comply with certain provisions set forth in the Registration Rights Agreement, we will be required to pay the Selling Stockholder liquidated damages. There can be no assurance that the registration statement of which this prospectus forms a part will be declared effective by the SEC or will remain effective for the time periods necessary to avoid payment of liquidated damages.

Our shareholders will experience dilution as a result of the Private Placement.

In June 2022, we issued 1,500,000 shares of common stock, and a warrant to purchase 1,500,000 shares of common stock, for aggregate proceeds of $15 million. The common stock was sold for a price of $10 per share and the warrant is exercisable at a price of $11.00 per share. If the warrant is exercised in full, shareholders of he Company will experience substantial dilution.

General Risk Factors

Business or economic disruptions could seriously harm our business.

Broad-based business or economic disruptions could adversely affect our business. For example, Russia's invasion of Ukraine has prompted the U.S. and other countries to announce sanctions against Russia. The full effect of this military conflict and related sanctions on the global economy and our existing and prospective customers, and as a result, our business, remains uncertain. While the onset of the COVID-19 global pandemic underscored the urgency of bringing to market air purification solutions to help protect front-line healthcare workers, patients and the general population, associated business shutdowns or disruptions could impair our ability to manufacture or sell our products, which would adversely affect our business, financial condition and results of operations.

If we lose key personnel or are unable to attract and retain qualified personnel, our business could be harmed, and our ability to compete could be impaired.

Our success depends, to a significant degree, upon the continued contributions of the members of our senior management and highly credentialed scientists. If we lose the services of one or more of these people, we may be unable to achieve our business objectives. We may be unable to attract and retain personnel with the advanced technical qualifications or managerial experience necessary for the development of our business and products or commercialization of our products. In addition, our current employees are at-will employees, which means that either we or the employee may terminate the employment relationship at any time, and our agreements with our independent contractors generally extend only on a monthly basis after an initial term, with the ability of either party to terminate the agreement upon prior notice to the other party.

We face intense competition.

We face, and will continue to face, intense competition from organizations such as large, diverse companies with extensive product development and manufacturing capabilities, as well as smaller specialized companies, that have developed and are attempting to develop air filtration and purification systems. We believe that the COVID-19 pandemic and recently discovered new more virulent and infectious strains of the coronavirus have increased, and will continue to increase, this competition. Further, the FDA Enforcement Policy for Sterilizers, Disinfectant Devices, and Air Purifiers during the Coronavirus Disease 2019 (COVID-19) Public Health Emergency and other temporary accommodations implemented by the FDA as a result of the COVID-19 pandemic to enable disinfectant devices, sterilizers, air purifiers, and other medical equipment to be brought to market in an expedited manner has made it easier for new entrants to enter into our market.

Although we believe that we have significant competitive advantages over other organizations, our competitors may develop and commercialize products and technologies that compete with our products and

technologies. Organizations that compete with us may have substantially greater financial resources than we do and may be able to: (i) provide broader services and product lines; (ii) make greater investments in research and development; (iii) carry on larger research and development initiatives; (iv) undertake more extensive marketing campaigns; and (v) adopt more aggressive pricing policies than we can. Our competitors may also have greater name recognition and better access to customers than we do. We also expect to continue to face competition from alternative technologies. Our technology and products may be rendered obsolete or uneconomical by advances in existing technological approaches or products or the development of different approaches or products by one or more of our competitors.

We may not be able to achieve or maintain satisfactory pricing and margins for our products, which could harm our business and results of operations.

We can give no assurance that we will be able to maintain satisfactory prices for our Pūrgo and Pūrgo Lift devices and other products we develop in the future. If we are forced to lower the price we charge for our Pūrgo and Pūrgo Lift devices, our gross margins will decrease, which will harm our ability to invest in and grow our business. If we are unable to maintain our prices, or if our costs increase and we are unable to offset such increase with an increase in our prices, our margins could erode, which could harm our business, financial condition and results of operations.

We may acquire other companies or technologies, which could divert our management's attention, result in additional dilution to stockholders and otherwise disrupt our operations and adversely affect our business, financial condition and results of operations.

Our success will depend, in part, on our ability to grow our business, which can include acquisitions. We may identify opportunities to establish industry leadership domestically and internationally through selective joint ventures and acquisitions that further capitalize on our differentiated technology. In some circumstances, we may determine to do so through the acquisition of complementary businesses and technologies rather than through internal development. We may also seek to acquire businesses in industries in which we do not currently operate. Some of these acquisitions or other transactions may be material. The identification of suitable acquisition candidates can be difficult, time-consuming and costly, and we may not be able to successfully complete identified acquisitions. The risks we face in connection with acquisitions include:

- diversion of management's time and focus from operating our business to addressing acquisition integration challenges;
- coordination of technology, research and development and sales and marketing functions;
- retention of employees from the acquired company;
- cultural challenges associated with integrating employees from the acquired company into our organization;
- integration of the acquired company's accounting, management information, human resources and other administrative systems;
- the need to implement or improve controls, policies and procedures at a business that prior to the acquisition may have lacked effective controls, policies and procedures;
- potential write-offs of intangibles or other assets acquired in such transactions that may have an adverse effect on our results of operations;
- liability for activities of the acquired company before the acquisition, including patent and trademark infringement claims, violations of laws, commercial disputes, tax liabilities and other known and unknown liabilities; and
- litigation or other claims in connection with the acquired company, including claims from terminated employees, consumers, former stockholders or other third parties.

Our failure to address these risks or other problems encountered in connection with acquisitions and investments could result in our failure to realize the anticipated benefits of these acquisitions or investments,

cause us to incur unanticipated liabilities and otherwise harm our business. Future acquisitions could also result in dilutive issuances of our equity securities, the incurrence of debt, contingent liabilities, amortization expenses or the write-off of goodwill, any of which could harm our financial condition. Also, the anticipated benefits of any acquisitions may not materialize. Any of these risks, if realized, could materially and adversely affect our business, financial condition and results of operations.

Security breaches, loss of data and other disruptions could compromise sensitive information related to our business, prevent us from accessing critical information or expose us to liability, which could adversely affect our business and our reputation.

We utilize information technology systems and networks to process, transmit and store electronic information in connection with our business activities. As the use of digital technologies has increased, cyber incidents, including deliberate attacks and attempts to gain unauthorized access to computer systems and networks, have increased in frequency and sophistication. These threats pose a risk to the security of our systems and networks and the confidentiality, availability and integrity of our data, all of which are vital to our operations and business strategy. There can be no assurance that we will be successful in preventing cyber-attacks or successfully mitigating their effects.

Despite the implementation of security measures, our computer systems and those of our current and future third-party service providers are vulnerable to damage or disruption from hacking, computer viruses, software bugs, unauthorized access or disclosure, natural disasters, terrorism, war and telecommunication, equipment and electrical failures. In addition, there can be no assurance that we will promptly detect any such disruption or security breach, if at all. Unauthorized access, loss or dissemination could disrupt our operations, including our ability to conduct research and development activities, process and prepare company financial information and manage various general and administrative aspects of our business. To the extent that any such disruption or security breach results in a loss of or damage to our data or applications, or inappropriate disclosure or theft of confidential, proprietary or personal information, we could incur liability, suffer reputational damage or poor financial performance or become the subject of regulatory actions by federal, state or non-U.S. authorities, any of which could adversely affect our business.

We may need to initiate lawsuits to protect or enforce our patents or other proprietary rights, which would be expensive and, if unsuccessful, may cause us to lose some of our intellectual property rights.

In order to protect or enforce our patent and other intellectual property rights, it may be necessary for us to initiate patent or other intellectual property litigation proceedings against third parties, such as infringement suits or interference proceedings. These lawsuits could be expensive, take significant time and could divert management's attention from other business concerns. These lawsuits could put our patents at risk of being invalidated or interpreted narrowly and our patent applications at a risk of not being issued. Further, these lawsuits may also provoke the defendants to assert claims against us. The patent position of medical device firms is highly uncertain, involves complex legal and factual questions and has recently been the subject of much litigation. There can be no assurance that we will prevail in any such suits or proceedings or that the damages or other remedies awarded to us, if any, will be commercially valuable.

We may be subject to legal proceedings in the ordinary course of our business. If the outcomes of these proceedings are adverse to us, it could have a material adverse effect on our business, financial condition and results of operations.

We may be subject to various litigation matters from time to time, which could have a material adverse effect on our business, financial condition and results of operations. Claims arising out of actual or alleged violations of law could be asserted against us by individuals, either individually or through class actions, by governmental entities in civil or criminal investigations and proceedings or by other entities. These claims could be asserted under a variety of laws, including but not limited to consumer finance laws, consumer protection laws, intellectual property laws, privacy laws, labor and employment laws, securities laws and employee benefit laws. These actions could expose us to adverse publicity and to substantial monetary damages and legal defense costs, injunctive relief and criminal and civil fines and penalties, including but not limited to suspension or revocation of licenses to conduct business.

Insurance policies may be expensive and only protect us from some business risks, which will leave us exposed to significant uninsured liabilities.

We do not know if we will be able to obtain and maintain insurance with adequate levels of coverage. Any significant uninsured liability may require us to pay substantial amounts, which may adversely affect our business, financial position and results of operations.

Our results of operations may fluctuate significantly, which will make our future results difficult to predict and could cause our results to fall below expectations.

Our quarterly and annual results of operations may fluctuate significantly, which will make it difficult for us to predict our future results. These fluctuations may occur due to a variety of factors, many of which are outside of our control and may be difficult to predict, including, but not limited to:

- the timing and cost of, and level of investment in, research, development and commercialization activities, which may change from time to time;
- the timing and cost of, and level of investment in, research and development relating to our technologies and our current or future facilities;
- expenditures that we may incur to acquire, develop or commercialize additional products and technologies;
- the level of demand for any future products, which may vary significantly over time;
- customer mix and the varying lengths of sales cycles for different customer segments;
- developments involving our competitors;
- the cost of servicing and maintaining our products;
- the cost of manufacturing, as well as building out our supply chain, which may vary depending on the quantity of productions, and the terms of any agreements we enter into with third-party suppliers; and
- general market conditions and other factors, including factors unrelated to our operating performance or the operating performance of our competitors.

The cumulative effects of these factors could result in large fluctuations and unpredictability in our quarterly and annual results of operations. As a result, comparing our results of operations on a period-to-period basis may not be meaningful. Investors should not rely on our past results as an indication of our future performance.

This variability and unpredictability could also result in our failing to meet the expectations of industry or financial analysts or investors for any period. If our revenue or results of operations fall below the expectations of analysts or investors or below any forecasts we may provide to the market, or if the forecasts we provide to the market are below the expectations of analysts or investors, the price of our common stock could decline substantially. Such a stock price decline could occur even when we have met any previously publicly stated revenue or operating guidance we may provide.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

The statements contained in this prospectus that are not purely historical are forward-looking statements. Forward-looking statements include, but are not limited to, statements regarding expectations, hopes, beliefs, intentions or strategies regarding the future. In addition, any statements that refer to projections, forecasts or other characterizations of future events or circumstances, including any underlying assumptions, are forward-looking statements. The words "anticipate," "believe," "continue," "could," "estimate," "expect," "intend," "may," "might," "plan," "possible," "potential," "predict," "project," "should," "would" and similar expressions may identify forward-looking statements, but the absence of these words does not mean that a statement is not forward-looking. Forward-looking statements in this prospectus may include, for example, statements about:

- our total addressable market;
- general economic conditions in the markets where we operate;
- the impact of the COVID-19 pandemic and related prophylactic measures;
- the expected timing of regulatory approvals and product launches;
- non-performance of third-party vendors and contractors;
- risks related to our ability to successfully sell our products and the market reception to and performance of our products;
- our compliance with, and changes to, applicable laws and regulations;
- our limited operating history;
- our ability to manage growth;
- our ability to obtain additional financing when and if needed;
- our ability to expand product offerings;
- our ability to compete with others in our industry;
- our ability to protect our intellectual property;
- the ability of certain existing stockholders to determine the outcome of matters which require stockholder approval;
- Our results of operations;
- our ability to defend against legal proceedings; and
- our success in retaining or recruiting, or changes required in, our officers, key employees or directors.

The forward-looking statements contained in this prospectus are based on current expectations and beliefs concerning future developments and their potential effects on us. There can be no assurance that future developments will be those that have been anticipated. These forward-looking statements involve a number of risks, uncertainties (some of which are beyond our control) or other assumptions that may cause actual results or performance to be materially different from those expressed or implied by these forward-looking statements. These risks and uncertainties include, but are not limited to, those factors described under the section entitled "Risk Factors." Should one or more of these risks or uncertainties materialize, or should any of our assumptions prove incorrect, actual results may vary in material respects from those projected in these forward-looking statements. We undertake no obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as may be required under applicable securities laws.

USE OF PROCEEDS

We will not receive any proceeds from the sale of shares of our common stock being offered for sale by the Selling Stockholder.

However, upon the cash exercise of the warrant, we will receive the exercise price of such warrant, for an aggregate amount of $16.5 million if the warrant is exercised in full. There is no assurance the warrants will be exercised, or if exercised, that they will be exercised for cash, the quantity which will be exercised or the period in which they will be exercised.

Our management will have broad discretion as to the application of the proceeds generated from the exercise of the warrant. Our management may use the proceeds for corporate purposes that may not improve our financial condition or the market value of our common stock.

The Company gained U.S. Food and Drug Administration (FDA) clearance to market and sell Pūrgo as a Class II Medical Device on June 1, 2022. The Company's strategy includes continuously evaluating a wide range of strategic opportunities including acquisitions. As part of that strategy, the Company is in discussions with several acquisition candidates and may use the proceeds of the warrant exercises, if any, together with other sources of capital, to effect transactions that the Company believes would substantially increase revenues, distribution and selling capability, and expand product lines, and, most importantly, add sensor and monitoring technology to enable the Company to effect its recurring revenue "Safe Air As a Service" model. The Company's goal is to provide actionable data to clients through the internet of things (IOT) to enable clients to provide Indoor Air Quality (IAQ) as part of their Indoor Environmental Quality (IEQ) initiatives. The Company currently has no material agreements or arrangements with any of the several acquisition candidates and there can be no assurance that any of these acquisitions, or any others, will be consummated.

DIVIDEND POLICY

We have not paid any cash dividends on our shares of common stock to date. The payment of cash dividends in the future will be dependent upon our revenues and earnings, if any, capital requirements and general financial condition and will be declared at the discretion of our Board. It is the current intention of our Board to retain all earnings, if any, for use in our business operations, and accordingly, our Board does not anticipate declaring any dividends in the foreseeable future. See the section entitled "Risk Factors — Risks associated with our common stock — We have never declared dividends and do not intend to."

Under Delaware law, dividends may be payable only out of surplus, which is calculated as our net assets less our liabilities and our capital, or, if we have no surplus, out of our net profits for the fiscal year in which the dividend is declared or the preceding fiscal year. There is no assurance that we will be able to satisfy these statutory requirements in the future.

BUSINESS

Overview

AeroClean Technologies is an interior space air purification technology company. Our immediate objective is to initiate the full-scale commercialization of our high-performance interior air sterilization and disinfection products for the eradication of harmful airborne pathogens, including COVID-19.

We were established to develop unmatched, technology-driven medical-grade air purification solutions for hospitals and other healthcare settings. The onset of the COVID-19 global pandemic underscores the urgency of bringing to market air purification solutions to help protect front-line healthcare workers, patients and the general population.

Interior air sterilization and disinfection solutions are critical for enabling and furthering societal transition to a safe, post-COVID-19 environment and for protecting patients, particularly immunocompromised patients, and staff in medical and healthcare facilities.

We incorporate our proprietary, patented UV-C LED technology in equipment and devices to reduce the exposure of occupants of interior spaces to airborne particles and pathogens. These spaces include hospital and non-hospital healthcare facilities (such as outpatient chemotherapy and other infusion facilities and senior living centers and nursing homes), schools and universities, commercial properties and other indoor spaces.

In July 2021, we completed the development stage of our first device, the Pūrgo room air purification unit, including design and independent testing and certification, as well as the scale-up of manufacturing, and began commercial production and sales. Pūrgo's launch also marks the debut of our go-to-market strategy for SteriDuct, the Company's patented air purification technology. We intend to incorporate SteriDuct into a broad line of autonomous air treatment devices. In February 2022, we debuted a prototype of Pūrgo Lift, our air purification solution for elevators and other wall-mount applications, and since then certain of our customers have been testing and evaluating Pūrgo Lift for future deployment in their facilities.

To support the transition to commercial operations, in July 2021, we also completed the build out of our corporate headquarters in Palm Beach Gardens, Florida, which includes our warehouse and distribution facility, as well as the site for our future service operations.

Our products are being designed and engineered to exceed the rigorous standards set by the FDA for Class II medical devices used for interior air sterilization and disinfection products. In June 2022, the FDA granted our Pūrgo technology 510(k) clearance for use in healthcare and other markets for which product performance to reduce the amount of certain airborne particles and infectious microbes in an indoor environment must be validated to specific standards. Our Pūrgo technology was tested and certified to meet such standards by independent laboratories. Regulatory clearances and independent certifications serve as important indications of product quality and performance that also influence decision-making by non-healthcare market equipment purchasers.

Pūrgo has been well-received by our customers. Our success depends to a large extent on our ability to increase sales of our Pūrgo device during 2022 and beyond.

Background and Purpose

We were established by our co-founders, Amin J. Khoury, PhD (Hon), our Chairman; David Helfet, M.D., our Chief Medical Officer; and Mark Krosney, our Chief Scientific Officer, to fulfill their determination to provide solutions for the critical challenges posed by harmful airborne pathogens and resultant HAIs.

HAIs and other infections acquired in outpatient treatment facilities present an extreme risk to the immunocompromised patient population. In the U.S. alone, it is estimated that 10 million people are immunocompromised. Whether in hospitals or infusion treatment locations, patients with cancer, and a multitude of other disease and disease related treatments, are at an elevated risk of infection. Constant air purification is of extreme benefit in these settings in order to minimize the presence of dangerous airborne pathogens due to the often catastrophic risk that infection poses to the immunocompromised patient

population. It is estimated that there are approximately 2 million HAIs annually in the United States, causing approximately 100,000 deaths and costing over $30 billion. These numbers are in-hospital only and do not include the likely much larger number of patients infected in outpatient infusion and treatment centers. For one example, there are more than 650,000 cancer patients that receive outpatient chemotherapy, and they are at risk for acquiring infections in these treatment facilities, despite advanced filtration and ventilation systems. In general, 60,000 cancer patients are hospitalized annually for chemotherapy-induced neutropenia and infections — one patient dies every two hours from this complication.

The onset of COVID-19 has increased our urgency to create innovative and more effective air purification solutions for the risks posed by harmful airborne pathogens, including coronavirus and other viruses, bacteria, molds, particles, fungi and allergens. Studies have shown 85% of COVID-19 transmission to be airborne person-to-person in the form of aerosolized droplets and in enclosed spaces. The Journal of Science estimates the annual U.S. cost of flu and respiratory infections at $50 billion, and the World Health Organization estimates that 4 million premature deaths annually are caused by air pollution.

The genesis of our proprietary air purification technology traces back to efforts to address commercial aircraft cabin air quality. Mr. Krosney is a highly-accomplished scientist who is primarily responsible for numerous patents, several of which are important components of our IP portfolio. Mr. Krosney is a former senior scientist and engineer at B/E Aerospace. Dr. Khoury, the founder and long-time Chairman and Chief Executive Officer of B/E Aerospace, envisioned the significant potential to apply such proprietary technology for revolutionary, medical-grade air purification solutions for hospital and other critical healthcare settings. Dr. Khoury consulted with Dr. David Helfet, a leading orthopedic surgeon at both the Hospital for Special Surgery and New York-Presbyterian Hospital, regarding possible solutions for the critical challenges to patients and hospitals posed by harmful airborne pathogens and HAIs.

This collaboration has served as the foundation for our Company and the implementation of our business plan. Dr. Khoury made a substantial investment in the Company, leading an investment group providing the necessary capital to develop the Company's substantial intellectual property portfolio and products.

Dr. Khoury is a renowned industrialist recognized for bringing to market game-changing solutions for diverse challenges and for building market-leading global businesses. Dr. Khoury was Chairman and Chief Executive Officer of B/E Aerospace, a Nasdaq-listed S&P 400 diversified industrial company, sold in April 2017 to Rockwell Collins (now, part of Raytheon) for $8.6 billion. Previously, in December 2014, B/E Aerospace completed the spin-off of KLX Inc. as an independent Nasdaq-listed public company, itself sold in May 2018 to Boeing for $4.25 billion. Drs. Khoury and Helfet were long-time colleagues who served together for many years on the board of directors of Synthes, Inc., which, led by Dr. Khoury's efforts, completed a $21 billion merger in 2012, creating DePuy Synthes, Johnson & Johnson's global orthopaedics business.

Several other members of our leadership team have long-standing working relationships with Dr. Khoury, including in senior-level roles at B/E Aerospace and KLX Inc.

Our Team

To more effectively exploit our patents and proprietary technology, we have assembled a team of highly credentialed scientists, with advanced degrees in electrical, mechanical and software engineering, as well as in physics, chemistry and related fields, in the development of our devices. This team, in conjunction with their counterparts from our FDA regulated contract manufacturing partner, have driven both the device performance and manufacturing optimization during the development stage of our Company and have positioned our Pūrgo device to be decisively superior, on both a performance and price basis, to existing FDA cleared (or seeking clearance) air purification devices currently on the market. Our team enabled us to develop our submission package, which received FDA 510(k) clearance to market the Pūrgo device.

Senior members of our team include:

Amin J. Khoury, PhD (Hon). Dr. Khoury is one of our co-founders and has been the Chairman of our Board of Directors since May 2020. Previously, Dr. Khoury served as Chief Executive Officer and Chairman of the Board of Directors of KLX Inc. from its formation in December 2014 until its sale to The

Boeing Company in October 2018. Dr. Khoury served as Chairman of the Board, Chief Executive Officer and Co-Chief Executive Officer of B/E Aerospace from its founding in 1987 until its sale to Rockwell Collins in 2017. Dr. Khoury also served as Chairman, Chief Executive Officer and President of KLX Energy from September 2018 until May 2020. Dr. Khoury was a Trustee of the Scripps Research Institute from May 2008 until July 2014. Until 2012, for 26 years, Dr. Khoury also served as a director of Synthes, Inc., having earlier been Chairman of Synthes Maxillofacial, and a founding investor in Spine Products, Inc., which was acquired by Synthes in 1999. Synthes, a $4 billion annual revenue company, was the world's leading manufacturer and marketer of orthopedic trauma implants and a leading global manufacturer and marketer of cranial-maxillofacial and spine implants, before Dr. Khoury led an effort to merge Synthes with Johnson & Johnson in a $21 billion transaction in 2012. Dr. Khoury holds an Executive Masters Professional Director Certification, the highest level, from the American College of Corporate Directors and a Master's Degree in Business Administration from Northeastern University. Dr. Khoury has served as a member of the Board of Trustees of Northeastern University since July 2018 and received an honorary doctorate from Northeastern University in May 2019. Dr. Khoury is a highly effective leader in organizational design and development matters and has been instrumental in identifying and attracting our managerial talent, team of highly accomplished scientists and Board members. He has an intimate knowledge of the Company, our industry and our competitors. All of the above experience and leadership roles uniquely qualify him to serve as our Company's Chairman of the Board.

David Helfet, M.D. Dr. Helfet is one of our co-founders and is currently our Chief Medical Officer and a Director. He is currently a Professor of Orthopaedic Surgery at the Weill Medical College of Cornell University and Director of the Combined Orthopaedic Trauma Service at both the Hospital for Special Surgery and New York-Presbyterian Hospital. He has served on several committees of the American Academy of Orthopaedic Surgeons, the AO/ASIF Foundation (currently the Chairman of AO Documentation and Publishing), AO North America and the American Board of Orthopaedic Surgery, among others. In addition, Dr. Helfet has been extensively involved in the Orthopaedic Trauma Association, including as President from 1998 to 1999, and is still on its board as a past President. He was Assistant Professor of Orthopaedic Surgery at Johns Hopkins University School of Medicine from 1982 to 1986, Associate Professor and Chief of Orthopaedic Trauma at the University of South Florida School of Medicine/Tampa General Hospital from 1986 to 1991 and at the Cornell University Medical College from 1991 to 1998. Dr. Helfet has been the recipient of many honors and awards, has published extensively on orthopedic trauma topics and is annually ranked as one of New York Magazine's "Best Doctors in New York" and Castle-Connolly's "America's Top Doctors." Dr. Helfet completed his undergraduate studies at the University of Cape Town, receiving a Bachelor of Science degree in biochemistry with honors, followed by medical school, where he received Bachelor of Medicine and Bachelor of Surgery degrees in 1975. His internship and surgical residency were completed at Edendale Hospital in Pietermaritzburg, South Africa and at Johns Hopkins University in Baltimore, Maryland, followed by orthopaedic residency also at Johns Hopkins University, then fellowships at the University of Bern, Insel Hospital in 1981 and at UCLA from 1981 to 1982. Dr. Helfet brings a unique perspective to our Board as a world renowned orthopedic surgeon, which, along with his intimate knowledge of our Company and our industry, uniquely qualifies him to serve as a member of our Board.

Mark Krosney. Mr. Krosney is one of our co-founders and is our Chief Scientific Officer. He has been the driving force in the development of AeroClean Technologies' proprietary technology. Mr. Krosney is primarily responsible for numerous patents, including several that are important parts of our IP portfolio. Mr. Krosney is a key member of the development team for the Pūrgo air purification and disinfection product development project. Prior to becoming Vice President and General Manager of B/E Aerospace's Business Jet Group, Mr. Krosney was B/E Aerospace's technical interface with The Boeing Company, Airbus and the Federal Aviation Administration. Earlier in his career, Mr. Krosney worked on jet engine and rocket propulsion systems as well as technical control systems at United Technologies. Mr. Krosney received his Bachelor of Science degree in Engineering from Carnegie Mellon University and a Master of Science degree in Management of Technology from the Sloan School at the Massachusetts Institute of Technology.

Jason DiBona. Mr. DiBona has served as our Chief Executive Officer since May 2020. Mr. DiBona brings more than 25 years of experience in developing and executing strategies for sustainable growth. He has held leadership roles in medical and healthcare technologies, global sales operations and start-up environments and has experience working with diverse private and public sector clients in more than

120 countries. Mr. DiBona spent the majority of his career, from 1999 to 2014, at GE Healthcare, holding multiple leadership and business development roles across the global healthcare organization. After his time at GE Healthcare, from 2014 to 2018, Mr. DiBona led the sales and marketing efforts at ePreop, a start-up medical software developer, with a successful launch and exit in the role of Executive Vice President of Sales and Marketing. Prior to AeroClean, Mr. DiBona served as Senior Vice President of Global Sales Strategies for America's largest homebuilder, Lennar Corporation. Mr. DiBona earned his Bachelor of Science degrees in Molecular Biology and Microbiology from the University of Central Florida.

Ryan Tyler. Mr. Tyler has served as our Chief Financial Officer since October 2020. Prior to joining AeroClean, Mr. Tyler held various positions from 2014 to 2020 at B/E Aerospace, Inc., KLX Inc. and KLX Energy Services Holdings, Inc., including Vice President, overseeing financial reporting, internal controls, corporate development, investor relations and financial planning and analysis. Prior to the KLX Inc. spin-off from B/E Aerospace, Mr. Tyler served as B/E Aerospace's Director of Financial Reporting and Internal Controls from 2013 to 2014, where he focused on the company's public filings, mergers and acquisitions and capital raises. Mr. Tyler also spent three years at Oxbow Carbon LLC, serving as a Controller responsible for several of the company's lines of business over the three-year period. Mr. Tyler spent five years at Ernst & Young as a Manager providing audit services to public and private clients in multiple sectors, including telecommunications, real estate, healthcare, financial services and distribution. Mr. Tyler received his Bachelor and Master of Accounting degrees from the University of Florida and received a Certified Public Accountant designation in Florida (inactive).

Michael Senft. Mr. Senft currently serves on our Board, where he is the Lead Independent Director. Over the past two years, Mr. Senft has served as a strategic advisor to several other venture stage companies, including acting as senior advisor to Critical Response Group, a venture-stage company established to apply battlefield protocols to homeland security applications. From 2014 to 2018, Mr. Senft served as Vice President — Chief Financial Officer, Treasurer and Head of Investor Relations of KLX Inc. Prior to his role at KLX Inc., Mr. Senft was an investment banker for over 30 years, including roles as Senior Managing Director at Moelis & Company, Global Head of Leveraged Finance at CIBC and Global Co-Head of Leveraged Finance at Merrill Lynch. Mr. Senft has also served on the Boards of Directors of B/E Aerospace, Del Monte Foods and Moly Mines Ltd. Mr. Senft received his Bachelor of Arts degree in Economics from Princeton University and his Master of Business Administration degree from the Stern School of Business at New York University. Mr. Senft's education and extensive experience in strategic business planning, coupled with a deep understanding of our business, uniquely qualify him to serve as a member of our Board.

Thomas P. McCaffrey. Mr. McCaffrey currently serves on our Board. He has been a member of the Board of Directors of KLX Energy since April 22, 2020. Mr. McCaffrey served as President, Chief Executive Officer and Chief Financial Officer of KLX Energy from May 2020 until July 2020 and as Senior Vice President and Chief Financial Officer of KLX Energy from September 2018 until April 30, 2020. Prior to that, Mr. McCaffrey served as President and Chief Operating Officer of KLX Inc. from December 2014 until its sale to The Boeing Company in October 2018 and as Senior Vice President and Chief Financial Officer of B/E Aerospace from May 1993 until December 2014. Prior to joining B/E Aerospace, Mr. McCaffrey practiced as a Certified Public Accountant for 17 years with a large international accounting firm and a regional accounting firm based in California. Since 2016, Mr. McCaffrey has served as a member of the Board of Trustees of Palm Beach Atlantic University and serves as a member of its various committees and is currently Chairman of its Audit Committee. Mr. McCaffrey received his Bachelor of Science degree in Business Administration with a concentration in Accounting from California Polytechnic State University-San Luis Obispo. Our Board benefits from Mr. McCaffrey's extensive leadership experience, thorough knowledge of our business and extensive strategic planning and public company experience.

Heather Floyd. Ms. Floyd currently serves on our Board. Ms. Floyd also currently serves as Director, Financial Reporting & Technical Accounting at Sequa Corporation. Previously, Ms. Floyd served as Vice President — Finance and Corporate Controller of KLX Energy and Vice President — Finance and Corporate Controller of KLX Inc. from February 2014 until September 2021. Ms. Floyd has almost 20 years of combined accounting, auditing, financial reporting and Sarbanes-Oxley compliance experience. Prior to joining KLX Inc., Ms. Floyd held various positions at B/E Aerospace, including most recently Vice President — Internal Audit. Prior to joining B/E Aerospace, Ms. Floyd served as an Audit Manager with

Ernst & Young and in various accounting roles at Corporate Express, now a subsidiary of Staples. Ms. Floyd is a Certified Public Accountant licensed to practice in Florida. Ms. Floyd received her Bachelor of Science and Engineering and Bachelor of Business Administration in International Business and Trade from Florida Atlantic University. Ms. Floyd's extensive accounting, auditing, financial reporting and public company experience qualify her to serve as a member of our Board.

Timothy J. Scannell. Mr. Scannell currently serves on our Board. Mr. Scannell brings over 30 years of experience and success delivering market-leading results from his leadership roles at Stryker, one of the world's leading medical technology companies. Mr. Scannell served as President and Chief Operating Officer of Stryker between 2018 and 2021, overseeing all of Stryker's commercial businesses and regions globally. Prior to this, he served as group president for Stryker's MedSurg & Neurotechnology businesses for ten years. Mr. Scannell currently serves as a director and non-executive chairman of the Board of Directors for Insulet Corporation and is a director on the boards of Novocure Limited, Renalytix plc and Collagen Matrix, Inc. Mr. Scannell attended the University of Notre Dame, where he received a bachelor's degree in Business Administration and Marketing and his Master of Business Administration. Mr. Scannell's extensive leadership experience, particularly with respect to public companies within the medical industry, qualify him to serve as a member of our Board.

Jimmy Thompson. Mr. Thompson is our Vice President of Strategic Sales. Over the course of three decades, Mr. Thompson has served many leadership roles in the healthcare industry. For the past 19 years at Cerner Corporation, Mr. Thompson has built and led highly successful teams at nationally recognized healthcare systems including: Broward Health, Moffitt Cancer Center, and Advent Health. Among his many accomplishments, Mr. Thompson is most recognized for leading proven business development strategies for CareAware — starting as a new platform by Cerner Corporation — a world-leading supplier of health information technology services, devices, and hardware used at more than 27,000 facilities around the world. Prior to Cerner, he held key sales roles at GE Healthcare and SIMS Portex and began his career working at Baptist Hospital in Nashville, Tennessee.

Nick DeAngelis, PhD. Dr. DeAngelis is our Director of Regulatory Affairs & Quality and, as a self-employed consultant, is a key member of the development team for the Pūrgo air purification and disinfection product development project. Dr. DeAngelis has over 40 years of experience in pharmaceutical companies, 25 years of which was at senior management levels, including Senior Director of the Analytical and Physical Chemistry departments at Wyeth Laboratories, a NYSE-listed public company acquired by Pfizer in 2009, and at Schering Plough Laboratories, a private company acquired by Merck & Co. in 2009. Dr. DeAngelis has worked for a number of years as a self-employed consultant assisting numerous pharmaceutical and medical device companies in product development and quality assurance. Dr. DeAngelis holds a Bachelor of Science degree in Physics, a Master of Science degree in Chemistry and a PhD in Chemistry from Villanova University.

Edward Lanzilotta, PhD. Employed at IPS, Dr. Lanzilotta is a key member of the development team for the Pūrgo air purification and disinfection product development project. He has held engineering and management positions at Draper Laboratory, Bolt, Beranek & Newman, American Science and Engineering, Scientific Systems Corp. and Airborne Instruments Laboratory. Dr. Lanzilotta holds a Bachelor of Science degree in Electrical Engineering, a Master of Science degree in Mechanical Engineering and a PhD in Mechanical Engineering from the Massachusetts Institute of Technology.

Rao Tella. Mr. Tella is our Director of Operations. He has been employed by Eaton Aerospace, Puritan Bennet Corporation, a Nasdaq-listed company acquired by Nellcor Incorporated in 1995 to form Nellcor Puritan-Bennet, and B/E Aerospace in various capacities, including Manager of R&D, Director of Operations, P&L responsibility as Vice President/General Manager of a $400 million business and Vice President of corporate strategy. Mr. Tella holds a Bachelor of Science degree in Engineering from the Indian Institute of Technology located in Chennai, a Master of Science degree in Engineering and a Master of Business Administration degree from the University of Minnesota and has completed a strategic studies program at Harvard University.

Bill Reisenauer. Mr. Reisenauer is our Lead Engineer on Pūrgo UV Subsystem Design, is a key member of the development team for the Pūrgo UV air purification and disinfection product development project and is the lead Engineer on the Pūrgo UV subsystem design, test and qualification. At B/E Aerospace,

Mr. Reisenauer was the director of engineering for the lighting products group and drove the introduction of LED technology into business and commercial aircraft lighting. Mr. Reisenauer holds a Master of Science degree in Electrical Engineering and a Bachelor of Science degree in Electrical Engineering from the Polytechnic Institute of New York and a Master of Business Administration from Adelphi University.

Karl Keppeler. Mr. Keppeler is our Lead Engineer on the Electrical Engineering and Embedded Software Subsystems and is a key member of the development team for the Pūrgo air purification and disinfection product. Mr. Keppeler is an IPS Fellow at IPS, where he has worked for over 11 years on customer projects in a range of industries. Prior to joining IPS, Mr. Keppeler worked in a variety of industries, including payment automation, telecommunications, mobile computing and vehicle electrification. Mr. Keppeler holds a Bachelor of Science degree and a Master of Engineering degree in Electrical Engineering and Computer Science from the Massachusetts Institute of Technology.

Joseph Toro. Mr. Toro is our Lead Industrial Design Engineer and is a key member of the development team for the Pūrgo air purification and disinfection product development project. Currently the director of Industrial Design at IPS, Mr. Toro has more than 20 years of experience developing award winning innovative solutions for consumer and professional products. Mr. Toro directed the design of products ranging from miniature motion control solutions for B/E Aerospace and medical clients to household appliances for Applica Black and Decker. Mr. Toro holds a Bachelor of Science degree in Industrial Design from the University of Bridgeport. Mr. Toro's team has worked closely with Mr. Krosney in the design of PūrgoLift, AeroClean's elevator implementation product line.

Our Opportunity

The COVID-19 pandemic has inspired intensive analysis of how pathogens are transmitted among humans and has isolated the role of airborne transmission as being among the most significant risks. While each pathogen is unique, deadly viruses proliferate and are transmitted between humans principally through the air, and then can also settle on surfaces and may remain contagious for extended periods of time depending upon the pathology. The application of ultraviolet ("UV") light to both the air and to surfaces has emerged as the most efficacious way to thoroughly eradicate pathogens without the use of chemicals, drugs or solvents, which may leave residues or have other deleterious implications for humans who come in contact after treatment. Most importantly, the UV-LED light embedded in our patented SteriDuct technology continuously treats the air passing through the Pūrgo device to help contain the spread of pathogens in any enclosed space where they are being continuously transmitted by an infected person. A sanitized room is no longer free from cross infection the moment an infected person enters it; and that person will continue to spread pathogens through the air for the duration of their presence, only mitigated by the ability of an in-room air purification system to destroy pathogens while they are being emitted.

The global air purification market for 2021 was estimated by industry sources at approximately $14.0 billion. We believe the emerging realization that pathogens introduced locally to a room will likely infect other occupants before the central building conditioning and filtering system can treat the air has led to a focus on continuous air treatment at the room level rather than at the building level. In addition, while historically air filtration has been predominantly focused on removing dust, spores, allergens and pathogens from air streams to maintain the efficiency (both energy and air quality) of large HVAC systems, we believe there is increasing focus on the ability to drive continuous, real-time pathogen elimination as part of the air filtration process. This includes the elimination of minute particles, including organic compounds, molds, bio-aerosols, bacteria and viruses.

We believe the large majority of conventional air purification products are built for the consumer market and only use air filtration as a way to filter — not eradicate — airborne pollutants. Many feature high-efficiency particulate air ("HEPA") and "HEPA like" filter material, which is designed to trap 99.97% of particles down to 0.3 microns. Viruses are much smaller than 0.3 microns, and studies show that viruses and drug-resistant bacteria can penetrate HEPA filters. As particle load builds-up and filters become "dirty," tunneling can occur allowing previously captured particulate and pathogens to break through filter material — increasing the probability of recontamination and infection in indoor spaces. We believe our patented UV-C LED SteriDuct technology augments HEPA filtration to not only filter pathogens but to kill them, and to do so continuously and effectively.

We expect that our patented UV-C LED SteriDuct technology, which has been developed over the past seven years, is adaptable to applications addressing major points of potential contamination in interior spaces. While originally developed principally to reduce the number of HAIs and to limit the exposure of immunocompromised patients to infectious microbes that cause HAIs, we have completed the development phase of the first commercial application of our technology just at the moment in history where we believe we can have a seminal impact on people's lives across society. We believe AeroClean Technologies can capture an expansive market opportunity by installing our patented devices in hospitals, outpatient treatment facilities, commercial offices, residential buildings, universities and schools, senior living and nursing homes, non-hospital healthcare facilities and human transport and travel industries, providing the Company with both initial sales revenue at attractive margins and a steady stream of aftermarket services revenues related to sales of replacement filters and recurring maintenance at attractive levels of profitability.

Through application and implementation of our UV-C LED technology, the Pūrgo and Pūrgo Lift devices have the potential to create comprehensive solutions for at-risk enclosed spaces.

In the year ended December 31, 2021, we launched the first commercial application of our technology with a lightweight (approximately 42 pounds) portable device, Pūrgo, that continuously purifies the air, and we have begun the manufacturing process to support this rollout. We have additional air purification applications also in development.

Our Strategy

Our mission is to establish AeroClean Technologies as the leader in creating a safe indoor environment, free of dangerous pathogens, particles, allergens, mold and fungi, for the healthcare, commercial office, educational and transportation marketplaces. Our goal is to become the leading provider of airborne pathogen-eradication solutions, through the application of air sanitization using our UV-C LED technology, and to create comprehensive solutions for at-risk enclosed spaces across hospitals, outpatient treatment facilities, universities and schools, senior living and nursing homes, non-hospital healthcare facilities, commercial buildings and the human transport and travel industries.

The key elements of our strategy are:

- Establish our technology and brand by beginning the commercial production and sale of the Pūrgo air purification device predominantly to hospitals and outpatient treatment facilities and the healthcare and medical office market, including surgery centers and doctors' offices.
- Utilize third party FDA regulated contract manufacturing to launch the Pūrgo office air purification device and establish a commercial footprint.
- Accelerate development and market introduction of our prototype PūrgoLift air purification solution for elevators, which is a critical need for large buildings to support occupants returning to and continuing to work in these buildings safely. Elevators create a point of acute vulnerability in both office buildings and in hospitals, where patients and outsiders are being transported at the same time, and who may carry pathogens into an environment where people are particularly vulnerable.
- Capitalize on the aviation industry expertise and credibility of the former founder and executive officers of B/E Aerospace, who are now leading AeroClean Technologies, to create strategic alliances with aviation industry suppliers to provide both ground-based and in-flight air purification systems based upon patented SteriDuct UV-C LED technology.
- Explore opportunities for collaboration and partnership with global industry leaders in HVAC to extend our UV-C LED air purification technology to the integrated air handling systems of large buildings.
- Identify opportunities to establish and extend our industry leadership internationally, through selective joint ventures and acquisitions that further capitalize on our superior technology.

The Company's strategy includes continuously evaluating a wide range of strategic opportunities including acquisitions. As part of that strategy, the Company is in discussions with several acquisition candidates and may seek to effect transactions that the Company believes would substantially increase revenues, distribution and selling capability, and expand product lines, and, most importantly, add sensor

and monitoring technology to enable the Company to effect its recurring revenue "Safe Air As a Service" model. The Company's goal is to provide actionable data to clients through the internet of things (IOT) to enable clients to provide Indoor Air Quality (IAQ) as part of their Indoor Environmental Quality (IEQ) initiatives. The Company currently has no material agreements or arrangements with any of the several acquisition candidates and there can be no assurance that any of these acquisitions, or any others, will be consummated.

Our Strengths

We believe AeroClean Technologies is uniquely positioned to capitalize on the emerging market for air sterilization products and services and that we will act as a disrupter to the existing hierarchy of traditional HVAC and cleaning businesses that do not adequately address the emerging threat of human pathogen cross infection and transmission.

We believe our principle strengths in capturing this opportunity are:

- Superior core technology embedded in our patented, UV-C LED air treatment technology utilized in the Pūrgo air purification device, which the FDA has indicated that we can market and sell for intended use through 510(k) clearance.
- Efficacy validated through independent testing at third party laboratories and FDA 510(k) clearance, validating the design and manufacturing rigor of the Pūrgo air purification device.
- Our growing team of dedicated engineers, regulatory officers and sales and marketing professionals, which we believe will provide our Company with a significant competitive advantage over our smaller and regional competitors, as well as those larger competitors who are not focused specifically on pathogen elimination as a dedicated priority and do not currently have truly competitive products in their portfolios of products and services.
- Our executive team, which includes our chief executive officer and chief financial officer, with backgrounds in building and leading international healthcare sales teams and growing large, international public companies organically and through strategic acquisitions, respectively, establishing the cornerstone of a first-class management team.
- Time, capital and expertise of the team dedicated to the development and manufacturing of the Pūrgo air purification device, which separates it from its competition and which we believe will generate differential outcomes when marketing to hospital and non-hospital healthcare customers as well as other discriminating target markets.
- The credibility in the healthcare market afforded us by our founding partner and Chief Medical Officer, Dr. David Helfet.
- The business building acumen and leadership of our founding partner, Amin J. Khoury. Dr. Khoury, as the Founder and formerly Chairman and Chief Executive Officer of B/E Aerospace, the world's leading commercial aircraft cabin interiors company prior to its acquisition by Rockwell Collins, built the business through both organic growth and acquisitions, by establishing superior in-house engineering and global sales capability, and by driving innovations across product categories, thereby establishing B/E Aerospace as the world leader and differential partner to its airline customers, as well as to The Boeing Company, Airbus and the business jet manufacturers.
- The expertise and leadership of Jason DiBona, to lead the Company as Chief Executive Officer, who we believe provides us with strong judgment on the healthcare industry's future development trends based on his prior experience at GE Healthcare.
- Our product is priced such that it can be quickly implemented and fit within multiple budgets, making it marketable to a wide range of hospital medical departments and other customers.

Our History

The genesis of our SteriDuct and Pūrgo technology traces back to technology developed by Mark Krosney, Co-Founder and Chief Scientific Officer, a highly-accomplished scientist and formerly one of the

lead engineers of B/E Aerospace. The technology was originally intended to address commercial aircraft cabin air quality applications. However, Amin J. Khoury, the Founder and formerly the Chairman and Chief Executive Officer of B/E Aerospace, recognized the commercial potential of this technology for the healthcare market, after discussions with Dr. David Helfet, Co-Founder and the Director Emeritus of the Orthopedic Trauma Service at both the Hospital for Special Surgery and the New York-Presbyterian Hospital, regarding the critical challenge to patients and hospitals posed by HAIs. Dr. Khoury subsequently led an "angel" investment group in funding the Company up to our IPO, in particular to provide for rigorous design and development of Pūrgo in a manner conforming to demanding regulatory requirements and the development of substantial intellectual property.

Dr. Khoury and Dr. Helfet are long-time colleagues who developed a strong business relationship during their respective 26- and 10-year service on the board of directors of Synthes, Inc., a company with $4 billion of annual revenue and the world's leading manufacturer and marketer of orthopedic trauma implants. In 2011, Dr. Khoury, at the request of Hansjörg Wyss, Chief Executive Officer of Synthes, led an effort to sell Synthes. In 2012, Synthes successfully merged with Johnson & Johnson's DePuy franchise in a $21 billion transaction.

To date, our team was formed through the utilization of highly qualified independent contractors and executives, including scientists, engineers, sales and marketing resources and others with expertise in electrical, mechanical and software engineering, computer science and regulatory matters, as well as experience in the healthcare and medical device industries. We have used consultants and other contract personnel for product development and engineering projects as well as for outsourced manufacturing to leverage industry and subject matter experts as well as to manage the Company's fixed cost structure.

We believe the team AeroClean Technologies has assembled, in addition to its differentiated technology and product offering, positions the Company to establish itself as the category leader and industry consolidator in premium air purification solutions for rooms, elevators and transportation systems.

Dr. Khoury and his team, with an established track record and experience from B/E Aerospace in penetrating and ultimately becoming the industry leader for a comprehensive array of commercial aircraft cabin interior components in the face of multiple incumbent competitors, informs AeroClean Technologies' approach to the air purification market, which we believe is currently populated by a number of small companies with technology that relies predominantly on traditional filtration devices.

Leveraging Engineering, Manufacturing and Regulatory Expertise

In developing our patents and related intellectual property into commercial devices that will meet the exacting standards of medical device regulators, while at the same time creating a competitive advantage in our target markets, AeroClean Technologies has chosen to partner with leading companies with both engineering and FDA regulatory expertise as well as FDA regulated contract manufacturers. Utilization of the leading companies in their fields has allowed AeroClean Technologies to dramatically shorten the time-to-market of our Pūrgo device (our first marketable device), while also taking advantage of best-in-class engineering, regulatory expertise and assembly of our first commercial units without having to invest the substantial sums that would be required to establish all these capabilities in-house. The exacting standards embedded in our Pūrgo device are expected to deliver market leading performance in air purification with true competitive differentiation and which has supported final FDA 510(k) clearance for utilization in healthcare and other target markets where performance must be validated by certified independent laboratories.

Our in-house team, leveraging these organizations, has developed what we believe to be the lightest weight, most compact, powerful and cost-effective pathogen elimination device for our target markets.

AeroClean Technologies contracted with IPS, a leading medical and technology device engineering group, in developing the device configuration, which would optimize the performance and reliability of our patented UV-LED and SteriDuct technology. With over 100 designers and engineers who specialize in commercializing highly exacting applications of new technology, a dedicated IPS team has worked continuously with us to design, develop, test and source the components for the commercial production of the Pūrgo device. This is particularly true of electronics design and software engineering as well as product industrial design. To manufacture our first Pūrgo device, AeroClean Technologies has engaged Mack Molding, a leading contract

manufacturer of medical devices, which also has experience manufacturing devices for the transportation, energy/environment, defense/aerospace and consumer markets. AeroClean Technologies also engaged MethodSense, a regulatory affairs and quality assurance consulting firm, to reduce time to market and move our Pūrgo device successfully through the FDA regulatory process. MethodSense is a global medical device consultancy and software developer with over 21 years of deep industry experience, proven processes and modern technology focused on the commercial success of medical device companies.

Our Value Proposition

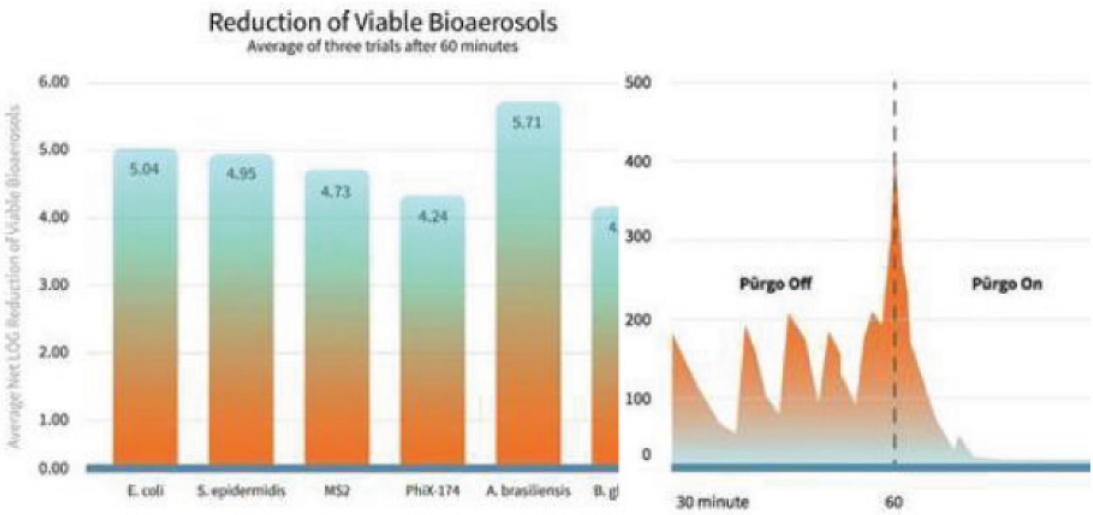
While there are numerous air filtration devices currently on the market, in addition to traditional filters fitted on HVAC systems primarily in hospitals, we believe the Pūrgo devices promise a step-change improvement in air treatment. By employing our patented UV-C LED and SteriDuct technology combined with three-stage filtration, our devices not only remove dust, spores, allergens and pathogens from the air but also eradicate essentially all types of airborne pathogens in occupied room airspaces and do so continuously. The process of upgrading HVAC systems in hospitals, schools, office buildings, commercial spaces and others looking for air quality solutions can not only be costly, but it can also be disruptive as the core system is retrofitted or construction takes place to address high-risk areas throughout the building.

Further, HVAC systems do not always run continuously and cannot, in any event, continuously protect a room's occupants as compared to Pūrgo, which is continuously running and placed close to potential sources of cross-infection. Larger plug-and-play solutions are generally more costly and, we believe, less effective because they cannot always be placed closest to the occupants we are protecting. Our first Pūrgo device is of a size and price point ($3,250 manufacturer's suggested retail price (MSRP)) that allows customers to strategically place units for optimal reduction of occupants' exposure to airborne particles and pathogens. We believe the combination of technology, performance and price of the Pūrgo devices will deliver a singular value proposition that will make AeroClean Technologies a disruptor and consolidator in the professional air treatment market.

Our Technological Advantage

The foundation of our patented pathogen-killing technology is the utilization of solid-state LEDs and the unique way we have deployed this LED technology through the development of our patented SteriDuct technology, which incorporates a proprietary geometry and reflective coating air induction and treatment process to safely deliver superior pathogen killing capability, while operating at lower power levels and with minimal air flow disruption. Our technology uses UV-emitting LEDs, which replaces conventional vacuum tube UV sources used in other competing UV devices — which are harmful to human beings and the environment and emit poisonous mercury gas when broken.

Studies of COVID-19 transmission have highlighted that, similar to seasonal flu viruses and other pathogens (such as severe acute respiratory syndrome, or "SARS," and Middle East respiratory syndrome, or "MERS"), COVID-19 is transmitted predominantly through contact between an infected person and others. To effectively limit this exposure, the air in the room that the infected person occupies must be continuously treated to remove the pathogens being transmitted into the air in the room. The Pūrgo device operates continuously, and the devices are able to be placed strategically within occupied rooms to treat the infected air closer to the source of the infectious material, rather than have the air pulled from the room through traditional filtering systems. Testing results confirmed that our device, powered by SteriDuct, was able to eradicate 99.99% ("4 Log") of airborne pathogens in less than 60 minutes, including a surrogate pathogen for COVID-19.



The Pūrgo air filtration machine is a compact, lightweight, powerful, energy efficient device that we believe delivers best-in-class performance. The LEDs used in Pūrgo produce UV output at precisely the wavelength to maximize pathogen killing, 265 nanometers. Our utilization of LEDs reflects the advances in LED technology that have made LEDs superior to UV vacuum tube bulbs in terms of energy efficiency, superior air flow dynamics and safety. The cost of LEDs has come down by a factor of ten on a per watt basis over the past decade, while the effective operational life has also grown by ten, and output power has increased by a factor of seven. By contrast, UV vacuum tubes are an old technology, which cannot be operated in the presence of human beings and for which we believe significant performance improvements have been infrequent and have had less impact. LEDs also meet current environmental best practices, as they have no toxic materials such as mercury, which are prevalent in conventional UV lamps.

We developed our patented SteriDuct operating system to optimize the application of state-of-the-art UV-C LEDs in several pathogen killing configurations. Optical analysis tools such as ray tracing, combined with mathematical modeling, allow us to geometrically locate the LEDs in the exact spot in SteriDuct to maximize light intensity. Further, material scientific developments have enabled us to utilize alenod material in the coating of SteriDuct, which triples the pathogen killing irradiance of SteriDuct, and computational fluid dynamics were applied in the positioning of the LEDs to optimize air flow and minimize air pressure loss, thereby reducing fan and motor requirements to circulate air, which reduces size, weight and cost while achieving 4 Log average kill rates (99.99%) against viral, bacterial and fungal pathogens. To validate and prove the pathogen killing power of SteriDuct, we have completed extensive microbial testing in Good Laboratory Practice (“GLP”) compliant, independent laboratories.

Since the design architecture of the pathogen killing SteriDuct has an efficient high air flow and a low pressure loss profile, the design is flexible and can be incorporated into many applications. Implementation of our SteriDuct technology into the Pūrgo devices incorporates both a sophisticated filtration system that reduces particles, odors, organic solvents, bacteria, viruses, allergen and mold, as well as our patented UV-C LED based pathogen killing system. SteriDuct may also be used in large spaces such as lecture halls and auditoriums. SteriDuct purification devices can be deployed at the HVAC discharge grille or at the central air handler. This implementation would not require additional fans in the air handler due to the low-pressure characteristics of SteriDuct. We expect that similar configurations can be developed for airplanes and buses.

Our Target Markets

We believe our technology is adaptable and superior in the treatment of air and destruction of pathogens in any interior space. The market for our technology, therefore, is both large and global in nature — we estimate the total addressable market opportunity just within the U.S. healthcare market to be approximately $12 billion. Our proprietary patents and the validation of our first device, the compact,

lightweight, powerful and cost-effective Pūrgo air purification device, will be important in establishing our brand and commercial footprint.

The markets we intend to focus on initially will be predominantly in the healthcare industry, as the inspiration for our technology was to address the high rate of HAIs acquired throughout hospitals, but particularly in surgeries and outpatient treatment areas with the highest population of immunocompromised patients. Moreover, the healthcare industry in the U.S. represents an approximately $12 billion market opportunity that will continue to be on the front lines of dealing with pathogens and, therefore, we expect will be receptive to technological advances that address the issue. We are acutely focused on the breadth of healthcare facilities that would benefit from utilization of Pūrgo and Pūrgo Lift devices, as well as our SteriDuct technology. In the U.S. alone, there are 6,090 hospitals, which have 208,500 on-site surgical facilities. In addition, these hospitals have 106,000 intensive care beds, predominantly each in their own room, and 825,000 non-ICU beds, usually configured with three beds per room. We have also assumed each hospital has 15 waiting rooms across both the general admittance and specialty practices within the facility and that each hospital has a minimum of seven elevators. As a result, in total, we estimate the approximate total market opportunity for the Pūrgo device within the U.S. hospital system to be $2.4 billion. For example, our largest customer in 2021, which made up 45% of revenues, was a hospital with a broad deployment of 100 units to address a variety of clinical and non-clinical spaces. While these individual customers may be significant, and customers may purchase units over time to satisfy their needs, we believe that the transactional nature of the opportunities and the size of the addressable market mitigate a risk of concentration on an ongoing basis.

We believe the non-hospital medical market presents an equally compelling opportunity. There are approximately 209,000 medical offices in the U.S., as well as 9,280 non-hospital surgery centers containing 16,000 procedure rooms. We believe that most rooms could utilize a minimum of two Pūrgo devices to optimize room sanitization and disinfection, representing a market opportunity of approximately $4.3 billion.

Our third expected healthcare market opportunity is serving the long-term care and assisted living industry. We view this market as a natural extension of the first two areas, hospital and medical offices, which we will address in the first phase of our commercial launch. There are currently 60,000 long-term care and assisted living facilities in the U.S., and we believe, from a safety and fiduciary position, each facility should consider coverage of the common facilities, including dining rooms, activity rooms, therapy rooms and, importantly, reception areas and elevators, representing a market opportunity of approximately $5.1 billion, exclusive of elevators.

We believe adoption of the Pūrgo device in the healthcare environment will create substantial credibility and momentum that will provide us an opportunity to enter the university and K-12 school market. For example, on March 11, 2021, President Biden signed the $1.9 trillion coronavirus relief package, the American Rescue Plan, which included $130 billion to help schools reopen safely by reducing the probability of cross-infection — including for personal protective equipment, reducing class sizes and, importantly, improving ventilation. In a 2021 report on K-12 public school infrastructure, the American Society of Civil Engineers found that more than 40% of schools had HVAC systems in need of repair. Therefore, we believe that the K-12 school market represents a market opportunity of approximately $1 billion. We are engaging in activities with a goal of accessing the K-12 school market, including direct marketing to school administrators online and working with third-parties that specialize in marketing to K-12 schools. While our primary focus in 2022 has been establishing our commercial footprint within the healthcare markets as previously noted, we expect to see word-of-mouth driven demand from universities and schools as the year progresses. We estimate the total addressable market opportunity within the U.S. education and childcare markets (public and private K-12 schools, universities and colleges, preschool and daycare) to be approximately $9.7 billion.

Similarly, we believe emerging public awareness of the realities of airborne infections are focusing both tenants and landlords on the inadequacies of centralized HVAC systems for protecting occupants in individual rooms, in the instance when an infected person is also in the room and contagious. Only localized, continuous sanitizing of the air can reduce the risk of infection in these circumstances. We believe prophylactic placement of the Pūrgo devices in conference rooms, open work environments, cafeterias, lobbies and other communal spaces will substantially improve the air quality of these areas well beyond what is provided by central HVAC systems and thereby make it safe to return to and remain at work in multi-story

office buildings. We estimate the total addressable market opportunity within the U.S. for elevator air purification to be approximately $5.0 billion.

Commercialization Plan

As mentioned above, we launched the first commercial application of our technology with the Pūrgo air purification device in July 2021 and have begun the manufacturing start up process to support this rollout. Our founding investors have invested approximately $15 million to date to support our technology conceptualization, product design, prototyping, testing and pre-product launch expenses, we raised an additional approximately $21.6 million in net proceeds in our IPO, and we raised an additional $15 million (less fees and expenses) in connection with the Private Placement. We have engaged Mack Molding, an FDA-regulated subsidiary of the privately held Mack Group, to manufacture our first Pūrgo device. Mack Molding is a leading contract manufacturer of medical devices, with a focused team of product development, program management, quality, regulatory, document control and purchasing staff that are skilled in medical device manufacturing.

We have sold the Pūrgo air purification device principally to hospitals, outpatient facilities and medical offices in multi-unit transactions to optimize both our sales productivity and our ability to provide efficient aftermarket service to our proprietary devices. We have begun the process of hiring a dedicated sales team to support our targeted sales efforts. We are also exploring exclusive distribution arrangements with several potential distribution and service partners, both domestically and internationally, which could help accelerate the market penetration of our devices more rapidly than on a purely organic basis.

We launched the Pūrgo device into the multi-billion dollar Florida healthcare market initially, focusing principally on reducing the exposure of immunocompromised patients to airborne pathogens while in chemotherapy and other outpatient infusion centers, general, specialty and eye surgery-centers and medical offices. We believe the Florida medical market is both extensive and representative of the larger healthcare opportunity across the U.S. and that penetrating this market will allow us to scale up our operations at the same time from our corporate offices in Palm Beach Gardens, Florida. We intend to grow our sales organization ahead of demand to take advantage of the learning curve afforded by our sales in Florida.

At the same time as we are marketing our room air purification device, we intend to accelerate our development of complementary devices that will address other points of pathogen vulnerability within the work and travel markets. Our highest priority in this regard is our elevator air purification device, Pūrgo Lift. We believe the tight enclosure of elevators is a “hot spot” for pathogen transmission that will be crucial for every high rise building to address in re-opening safely. This is particularly true in hospitals, where sick, vulnerable patients and visitors are regularly together on lifts. We developed working prototypes of the Pūrgo Lift device for beta testing and market feedback by the end of 2021, and we expect one of our customers to begin trialing the device in one of its public elevators during the first half of 2022 to evaluate for future deployment across the customer’s facilities.

The commercial aviation market is also at a critical stage, with safe travel contingent on the ability to move passengers safely through airport waiting and boarding areas and to treat cabin air in-flight and to disinfect aircraft cabins between flights. Our SteriDuct technology was first developed by one of the former lead engineers of B/E Aerospace, a world leader in cabin interiors, including oxygen systems, and in its current form is adaptable to this application.

Similar to the commercial aviation market, we believe the large building HVAC market will provide substantial retrofit opportunities, as the current large systems generally rely on filtration systems that do not effectively remove and destroy pathogens flowing through the system. We intend to enter into discussions with the leading global HVAC suppliers, as well as directly with building owners, to develop retrofit applications for our SteriDuct technology that will complement existing installed systems in these large buildings.

Intellectual Property

The proprietary nature of, and protection for, our technology, processes and know-how are important to our business. Our commercial success will depend in part on obtaining and maintaining patent protection,

protecting our know-how and trade secrets, successfully defending any patents against third-party challenges and, where relevant, collaborating with third party licensors to obtain licenses to use relevant technology.

Our ability to stop third parties from making, using, selling, offering to sell or importing our products depends on the extent to which we have rights under valid and enforceable patents or trade secrets that cover these activities. We have been issued four patents in the U.S. We also have a number of other patent applications pending in the U.S. and other jurisdictions, including Europe and Japan. Our patent portfolio includes patents relating to our UV-C LED SteriDuct technology, which is incorporated into our Pūrgo and Pūrgo Lift products.

We cannot be sure that patents will be granted with respect to any of pending patent applications or with respect to any patent applications we file in the future, nor can we be sure that any existing patents or any patents that may be granted in the future upon which we rely will be commercially useful in protecting our products or processes. See the sections entitled "Risk Factors — Our success may depend on our ability to protect our intellectual property" and "— We may need to initiate lawsuits to protect or enforce our patents or other proprietary rights, which would be expensive and, if unsuccessful, may cause us to lose some of our intellectual property rights."

Competition

We believe that the COVID-19 pandemic has increased, and will continue to increase, the global focus on clean air. We experience competition from organizations such as large, diverse companies with extensive product development and manufacturing, as well as smaller specialized companies, that have developed and are attempting to develop air filtration and purification systems. We believe that we have significant competitive advantages over other organizations. For example, we believe that competitive products to the Pūrgo device in the "medical grade" niche are expensive, cumbersome and have a limited effective life.

Additionally, we believe many of our competitors are promoting technologies that are not proven, do not have enough scientific data and are potentially harmful. Importantly, our Pūrgo technology meets or exceeds each of the air purifiers guidelines and recommendations by the Centers for Disease Control and Prevention, Environmental Protection Agency and the American Society of Heating, Refrigerating and Air-Conditioning Engineers.

Our competitors may develop and commercialize products and technologies that compete with our products and technologies. Organizations that compete with us may have substantially greater financial resources than we do and may be able to: (i) provide broader services and product lines; (ii) make greater investments in research and development; (iii) carry on larger research and development initiatives; (iv) undertake more extensive marketing campaigns; and (v) adopt more aggressive pricing policies than we can. They also may have greater name recognition and better access to customers than we do. We also expect to continue to face competition from alternative technologies. Our technology and products may be rendered obsolete or uneconomical by advances in existing technological approaches or products or the development of different approaches or products by one or more of our competitors. See the risk described under the section entitled "Risk Factors — We face intense competition."

Facilities

Our principal executive offices are located at 10455 Riverside Drive, Palm Beach Gardens, FL 33410. We lease approximately 20,000 square feet at this location, which includes our warehouse and distribution facilities. We consider these facilities adequate for our current operations.

Employees

We utilize the services of nine direct employees. The Company also utilizes full-time independent contractors and full-time equivalent consultants as well as consulting firms for product development, engineering, quality and regulatory matters, investor relations, marketing and advertising, public relations and social media. The services of our Chief Scientific Officer, Director of Engineering & Product Development, Director of Regulatory Affairs & Quality and Director of Operations are provided to us

under service arrangements. We also utilize many consultants in the ordinary course of our business and hire additional personnel on a project-by-project basis. We believe that our employee and labor relations are good.

Legal Proceedings

We are not currently party to any legal proceedings, the adverse outcome of which, individually or in the aggregate, we believe will have a material adverse effect on our business, financial condition or results of operations.

REGULATION

We are subject to regulation by the FDA in marketing the Pūrgo device, having received 510(k) clearance in June 2022. The FDA granted our Pūrgo technology 510(k) clearance in June 2022, classifying it as a Class II Medical Device. FDA 510(k) clearance enables the marketing and use of our products as medical devices in healthcare and other markets for which product performance is required to be validated by certified independent labs.

The FDA regulates the development, design, manufacturing, safety, effectiveness, labeling, packaging, storage, installation, servicing, recordkeeping, clearance, adverse event reporting, advertising, promotion, marketing and distribution, and import and export of medical devices to ensure that medical devices distributed domestically are safe and effective for their intended uses and otherwise meet the requirements of the FDCA.

After an air purification product is cleared for marketing as a medical device, numerous and pervasive regulatory requirements continue to apply. These include:

- establishment registration and device listing with the FDA;
- requirements that manufacturers, including third-party manufacturers, follow stringent design, testing, control, documentation and other quality assurance procedures during all aspects of the design and manufacturing process;
- labeling and marketing regulations, which require that promotion is truthful, not misleading, fairly balanced and provides adequate directions for use and that all claims are substantiated;
- clearance of a new 510(k) premarket notification for modifications to 510(k) cleared devices that could significantly affect safety or effectiveness or that would constitute a major change in intended use of the device;
- medical device reporting regulations, which require that a manufacturer report to the FDA information that reasonably suggests a device it markets may have caused or contributed to a death or serious injury, or has malfunctioned and the device or a similar device that it markets would be likely to cause or contribute to a death or serious injury, if the malfunction were to recur;
- correction, removal and recall reporting regulations, which require that manufacturers report to the FDA field corrections and product recalls or removals if undertaken to reduce a risk to health posed by the device or to remedy a violation of the FDCA that may present a risk to health;
- complying with the federal law and regulations requiring Unique Device Identifiers on devices and also requiring the submission of certain information about each device to the FDA's Global Unique Device Identification Database;
- the FDA's recall authority, whereby the agency can order device manufacturers to recall from the market a product that is in violation of governing laws and regulations if the FDA finds that there is a reasonable probability that the device would cause serious, adverse health consequences or death; and
- post-market surveillance activities and regulations, which apply when deemed by the FDA to be necessary to protect the public health or to provide additional safety and effectiveness data for the device.

The Pūrgo device's manufacturing processes are required to comply with applicable regulations covering the methods and the facilities and controls for the design, manufacture, testing, production, processes, controls, quality assurance, labeling, packaging, distributions, installation and servicing of finished devices intended for human use. Regulations also require, among other things, maintenance of a device master record, device history file and complaint files. As a specification developer of a regulated medical device, our facilities and records relating to such devices are subject to periodic scheduled or unscheduled inspections by the FDA. In addition, as our contract manufacturer, Mack Molding's facilities, records and manufacturing processes are also subject to periodic scheduled or unscheduled inspections by the FDA. Following such inspections, the FDA may issue reports known as Forms FDA 483 or Notices of Inspectional Observations, which list instances where the FDA investigator believes the inspected entity has failed to comply

with applicable regulations and/or procedures. If the observations are sufficiently serious or the entity fails to respond appropriately, the FDA may issue a Warning Letter, which are notices of intended enforcement actions. For less serious violations that may not rise to the level of regulatory significance, the FDA may issue an Untitled Letter. The FDA may take more significant administrative or legal action, such as the shutdown of or placing restrictions on the entity's operations or the recall or seizure of related products, if the entity continues to be in substantial noncompliance with applicable regulations. The discovery of previously unknown problems with the Pūrgo device could result in restrictions on the device, including the inability to market the device for its intended use or voluntary or mandatory device recalls.

The FDA has broad regulatory compliance and enforcement powers. If the FDA determines that we failed to comply with applicable regulatory requirements, it can take a variety of compliance or enforcement actions, which may result in any of the following sanctions:

- warning letters, untitled letters, fines, injunctions, consent decrees and civil penalties;
- recalls, withdrawals or administrative detention or seizure of our Pūrgo devices;
- operating restrictions or partial suspension or total shutdown of production;
- refusal to grant export or import approvals for our products; or
- criminal prosecution.

MANAGEMENT

Executive Officers, Directors, Co-founders, Key Personnel and Contractors

Our current executive officers, directors, co-founders, key personnel and contractors are as set forth below.

Name	Age	Position
Amin J. Khoury, PhD (Hon)	83	Co-Founder, Chairman
David Helfet, M.D.	74	Co-Founder, Chief Medical Officer, Director
Mark Krosney	75	Co-Founder, Chief Scientific Officer
Jason DiBona	51	Chief Executive Officer
Ryan Tyler	38	Chief Financial Officer
Michael Senft	63	Lead Independent Director
Thomas P. McCaffrey	68	Director
Heather Floyd	43	Director
Timothy J. Scannell	57	Director
Jimmy Thompson	57	Vice President of Strategic Sales
Edward Lanzilotta, PhD	61	Director of Engineering & Product Development
Nick DeAngelis, PhD	82	Director of Regulatory Affairs & Quality
Rao Tella	74	Director of Operations
Bill Reisenauer	63	Lead Engineer on Pūrgo UV Subsystem Design
Karl Keppeler	48	Lead Engineer on the Electrical Engineering & Embedded Software Subsystems
Joseph Toro	52	Lead Industrial Design Engineer

Amin J. Khoury, PhD (Hon). Dr. Khoury is one of our co-founders and has been the Chairman of our Board of Directors since May 2020. Previously, Dr. Khoury served as Chief Executive Officer and Chairman of the Board of Directors of KLX Inc. from its formation in December 2014 until its sale to The Boeing Company in October 2018. Dr. Khoury served as Chairman of the Board, Chief Executive Officer and Co-Chief Executive Officer of B/E Aerospace from its founding in 1987 until its sale to Rockwell Collins in 2017. Dr. Khoury also served as Chairman, Chief Executive Officer and President of KLX Energy from September 2018 until May 2020. Dr. Khoury was a Trustee of the Scripps Research Institute from May 2008 until July 2014. Until 2012, for 26 years, Dr. Khoury also served as a director of Synthes, Inc., having earlier been Chairman of Synthes Maxillofacial, and a founding investor in Spine Products, Inc., which was acquired by Synthes in 1999. Synthes, a $4 billion annual revenue company, was the world's leading manufacturer and marketer of orthopedic trauma implants and a leading global manufacturer and marketer of cranial-maxillofacial and spine implants, before Dr. Khoury led an effort to merge Synthes with Johnson & Johnson in a $21 billion transaction in 2012. Dr. Khoury holds an Executive Masters Professional Director Certification, the highest level, from the American College of Corporate Directors and a Master's Degree in Business Administration from Northeastern University. Dr. Khoury has served as a member of the Board of Trustees of Northeastern University since July 2018 and received an honorary doctorate from Northeastern University in May 2019. Dr. Khoury is a highly effective leader in organizational design and development matters and has been instrumental in identifying and attracting our managerial talent, team of highly accomplished scientists and Board members. He has an intimate knowledge of the Company, our industry and our competitors. All of the above experience and leadership roles uniquely qualify him to serve as our Company's Chairman of the Board.

David Helfet, M.D. Dr. Helfet is one of our co-founders and is currently our Chief Medical Officer and a Director. He is currently a Professor of Orthopaedic Surgery at the Weill Medical College of Cornell University and Director of the Combined Orthopaedic Trauma Service at both the Hospital for Special Surgery and New York — Presbyterian Hospital. He has served on several committees of the American Academy of Orthopaedic Surgeons, the AO/ASIF Foundation (currently the Chairman of AO

Documentation and Publishing), AO North America and the American Board of Orthopaedic Surgery, among others. In addition, Dr. Helfet has been extensively involved in the Orthopaedic Trauma Association, including as President from 1998 to 1999, and is still on its board as a past President. He was Assistant Professor of Orthopaedic Surgery at Johns Hopkins University School of Medicine from 1982 to 1986, Associate Professor and Chief of Orthopaedic Trauma at the University of South Florida School of Medicine/Tampa General Hospital from 1986 to 1991 and at the Cornell University Medical College from 1991 to 1998. Dr. Helfet has been the recipient of many honors and awards, has published extensively on orthopedic trauma topics and is annually ranked as one of New York Magazine's "Best Doctors in New York" and Castle-Connolly's "America's Top Doctors." Dr. Helfet completed his undergraduate studies at the University of Cape Town, receiving a Bachelor of Science degree in biochemistry with honors, followed by medical school, where he received Bachelor of Medicine and Bachelor of Surgery degrees in 1975. His internship and surgical residency were completed at Edendale Hospital in Pietermaritzburg, South Africa and at Johns Hopkins University in Baltimore, Maryland, followed by orthopaedic residency also at Johns Hopkins University, then fellowships at the University of Bern, Insel Hospital in 1981 and at UCLA from 1981 to 1982. Dr. Helfet brings a unique perspective to our Board as a world renowned orthopaedic surgeon, which, along with his intimate knowledge of our Company and our industry, uniquely qualifies him to serve as a member of our Board.

Mark Krosney. Mr. Krosney is one of our co-founders and is our Chief Scientific Officer. He has been the driving force in the development of AeroClean Technologies' proprietary technology. Mr. Krosney is primarily responsible for numerous patents, including several that are important parts of our IP portfolio. Mr. Krosney is a key member of the development team for the Pūrgo air purification and disinfection product development project. Prior to becoming Vice President and General Manager of B/E Aerospace's Business Jet Group, Mr. Krosney was B/E Aerospace's technical interface with The Boeing Company, Airbus and the Federal Aviation Administration. Earlier in his career, Mr. Krosney worked on jet engine and rocket propulsion systems as well as technical control systems at United Technologies. Mr. Krosney received his Bachelor of Science degree in Engineering from Carnegie Mellon University and a Master of Science degree in Management of Technology from the Sloan School at the Massachusetts Institute of Technology.

Jason DiBona. Mr. DiBona has served as our Chief Executive Officer since May 2020. Mr. DiBona brings more than 25 years of experience in developing and executing strategies for sustainable growth. He has held leadership roles in medical and healthcare technologies, global sales operations and start-up environments and has experience working with diverse private and public sector clients in more than 120 countries. Mr. DiBona spent the majority of his career, from 1999 to 2014, at GE Healthcare, holding multiple leadership and business development roles across the global healthcare organization. After his time at GE Healthcare, from 2014 to 2018, Mr. DiBona led the sales and marketing efforts at ePreop, a start-up medical software developer, with a successful launch and exit in the role of Executive Vice President of Sales and Marketing. Prior to AeroClean, Mr. DiBona served as Senior Vice President of Global Sales Strategies for America's largest homebuilder, Lennar Corporation. Mr. DiBona earned his Bachelor of Science degrees in Molecular Biology and Microbiology from the University of Central Florida.

Ryan Tyler. Mr. Tyler has served as our Chief Financial Officer since October 2020. Prior to joining AeroClean, Mr. Tyler held various positions from 2014 to 2020 at B/E Aerospace, Inc., KLX Inc. and KLX Energy Services Holdings, Inc., including Vice President, overseeing financial reporting, internal controls, corporate development, investor relations and financial planning and analysis. Prior to the KLX Inc. spin-off from B/E Aerospace, Mr. Tyler served as B/E Aerospace's Director of Financial Reporting and Internal Controls from 2013 to 2014, where he focused on the company's public filings, mergers and acquisitions and capital raises. Mr. Tyler also spent three years at Oxbow Carbon LLC, serving as a Controller responsible for several of the company's lines of business over the three-year period. Mr. Tyler spent five years at Ernst & Young as a Manager providing audit services to public and private clients in multiple sectors, including telecommunications, real estate, healthcare, financial services and distribution. Mr. Tyler received his Bachelor and Master of Accounting degrees from the University of Florida and received a Certified Public Accountant designation in Florida (inactive).

Michael Senft. Mr. Senft currently serves on our Board, where he is the Lead Independent Director. Over the past two years, Mr. Senft has served as a strategic advisor to several other venture stage companies, including acting as senior advisor to Critical Response Group, a venture-stage company established to

apply battlefield protocols to homeland security applications. From 2014 to 2018, Mr. Senft served as Vice President — Chief Financial Officer, Treasurer and Head of Investor Relations of KLX Inc. Prior to his role at KLX Inc., Mr. Senft was an investment banker for over 30 years, including roles as Senior Managing Director at Moelis & Company, Global Head of Leveraged Finance at CIBC and Global Co-Head of Leveraged Finance at Merrill Lynch. Mr. Senft has also served on the Boards of Directors of B/E Aerospace, Del Monte Foods and Moly Mines Ltd. Mr. Senft received his Bachelor of Arts degree in Economics from Princeton University and his Master of Business Administration degree from the Stern School of Business at New York University. Mr. Senft's education and extensive experience in strategic business planning, coupled with a deep understanding of our business, uniquely qualify him to serve as a member of our Board.

Thomas P. McCaffrey. Mr. McCaffrey currently serves on our Board. He has been a member of the Board of Directors of KLX Energy since April 22, 2020. Mr. McCaffrey served as President, Chief Executive Officer and Chief Financial Officer of KLX Energy from May 2020 until July 2020 and as Senior Vice President and Chief Financial Officer of KLX Energy from September 2018 until April 30, 2020. Prior to that, Mr. McCaffrey served as President and Chief Operating Officer of KLX Inc. from December 2014 until its sale to The Boeing Company in October 2018 and as Senior Vice President and Chief Financial Officer of B/E Aerospace from May 1993 until December 2014. Prior to joining B/E Aerospace, Mr. McCaffrey practiced as a Certified Public Accountant for 17 years with a large international accounting firm and a regional accounting firm based in California. Since 2016, Mr. McCaffrey has served as a member of the Board of Trustees of Palm Beach Atlantic University and serves as a member of its various committees and is currently Chairman of its Audit Committee. Mr. McCaffrey received his Bachelor of Science degree in Business Administration with a concentration in Accounting from California Polytechnic State University — San Luis Obispo. Our Board benefits from Mr. McCaffrey's extensive leadership experience, thorough knowledge of our business and extensive strategic planning and public company experience.

Heather Floyd. Ms. Floyd currently serves on our Board. Ms. Floyd also currently serves as Director, Financial Reporting & Technical Accounting at Sequa Corporation. Previously, Ms. Floyd served as Vice President — Finance and Corporate Controller of KLX Energy and Vice President — Finance and Corporate Controller of KLX Inc. from February 2014 until September 2021. Ms. Floyd has almost 20 years of combined accounting, auditing, financial reporting and Sarbanes-Oxley compliance experience. Prior to joining KLX Inc., Ms. Floyd held various positions at B/E Aerospace, including most recently Vice President — Internal Audit. Prior to joining B/E Aerospace, Ms. Floyd served as an Audit Manager with Ernst & Young and in various accounting roles at Corporate Express, now a subsidiary of Staples. Ms. Floyd is a Certified Public Accountant licensed to practice in Florida. Ms. Floyd received her Bachelor of Science and Engineering and Bachelor of Business Administration in International Business and Trade from Florida Atlantic University. Ms. Floyd's extensive accounting, auditing, financial reporting and public company experience qualify her to serve as a member of our Board.

Timothy J. Scannell. Mr. Scannell currently serves on our Board. Mr. Scannell brings over 30 years of experience and success delivering market-leading results from his leadership roles at Stryker, one of the world's leading medical technology companies. Mr. Scannell served as President and Chief Operating Officer of Stryker between 2018 and 2021, overseeing all of Stryker's commercial businesses and regions globally. Prior to this, he served as group president for Stryker's MedSurg & Neurotechnology businesses for ten years. Mr. Scannell currently serves as a director and non-executive chairman of the Board of Directors for Insulet Corporation and is a director on the boards of Novocure Limited, Renalytix plc and Collagen Matrix, Inc. Mr. Scannell attended the University of Notre Dame, where he received a bachelor's degree in Business Administration and Marketing and his Master of Business Administration. Mr. Scannell's extensive leadership experience, particularly with respect to public companies within the medical industry, qualify him to serve as a member of our Board.

Jimmy Thompson. Mr. Thompson is our Vice President of Strategic Sales. Over the course of three decades, Mr. Thompson has served many leadership roles in the healthcare industry. For the past 19 years at Cerner Corporation, Mr. Thompson has built and led highly successful teams at nationally recognized healthcare systems including: Broward Health, Moffitt Cancer Center, and Advent Health. Among his many accomplishments, Mr. Thompson is most recognized for leading proven business development strategies for CareAware — starting as a new platform by Cerner Corporation — a world-leading supplier of health

information technology services, devices, and hardware used at more than 27,000 facilities around the world. Prior to Cerner, he held key sales roles at GE Healthcare and SIMS Portex and began his career working at Baptist Hospital in Nashville, Tennessee.

Nick DeAngelis, PhD. Dr. DeAngelis is our Director of Regulatory Affairs & Quality and, as a self-employed consultant, is a key member of the development team for the Pūrgo air purification and disinfection product development project. Dr. DeAngelis has over 40 years of experience in pharmaceutical companies, 25 years of which was at senior management levels, including Senior Director of the Analytical and Physical Chemistry departments at Wyeth Laboratories, a NYSE-listed public company acquired by Pfizer in 2009, and at Schering Plough Laboratories, a private company acquired by Merck & Co. in 2009. Dr. DeAngelis has worked for a number of years as a self-employed consultant assisting numerous pharmaceutical and medical device companies in product development and quality assurance. Dr. DeAngelis holds a Bachelor of Science degree in Physics, a Master of Science degree in Chemistry and a PhD in Chemistry from Villanova University.

Edward Lanzilotta, PhD. Employed at IPS, Dr. Lanzilotta is a key member of the development team for the Pūrgo air purification and disinfection product development project. He has held engineering and management positions at Draper Laboratory, Bolt, Beranek & Newman, American Science and Engineering, Scientific Systems Corp. and Airborne Instruments Laboratory. Dr. Lanzilotta holds a Bachelor of Science degree in Electrical Engineering, a Master of Science degree in Mechanical Engineering and a PhD in Mechanical Engineering from the Massachusetts Institute of Technology.

Rao Tella. Mr. Tella is our Director of Operations. He has been employed by Eaton Aerospace, Puritan Bennet Corporation, a Nasdaq-listed company acquired by Nellcor Incorporated in 1995 to form Nellcor Puritan-Bennet, and B/E Aerospace in various capacities, including Manager of R&D, Director of Operations, P&L responsibility as Vice President/General Manager of a $400 million business and Vice President of corporate strategy. Mr. Tella holds a Bachelor of Science degree in Engineering from the Indian Institute of Technology located in Chennai, a Master of Science degree in Engineering and a Master of Business Administration degree from the University of Minnesota and has completed a strategic studies program at Harvard University.

Bill Reisenauer. Mr. Reisenauer is our Lead Engineer on Pūrgo UV Subsystem Design, is a key member of the development team for the Pūrgo UV air purification and disinfection product development project and is the lead Engineer on the Pūrgo UV subsystem design, test and qualification. At B/E Aerospace, Mr. Reisenauer was the director of engineering for the lighting products group and drove the introduction of LED technology into business and commercial aircraft lighting. Mr. Reisenauer holds a Master of Science degree in Electrical Engineering and a Bachelor of Science degree in Electrical Engineering from the Polytechnic Institute of New York and a Master of Business Administration from Adelphi University.

Karl Keppeler. Mr. Keppeler is our Lead Engineer on the Electrical Engineering and Embedded Software Subsystems and is a key member of the development team for the Pūrgo air purification and disinfection product. Mr. Keppeler is an IPS Fellow at IPS, where he has worked for over 11 years on customer projects in a range of industries. Prior to joining IPS, Mr. Keppeler worked in a variety of industries, including payment automation, telecommunications, mobile computing and vehicle electrification. Mr. Keppeler holds a Bachelor of Science degree and a Master of Engineering degree in Electrical Engineering and Computer Science from the Massachusetts Institute of Technology.

Joseph Toro. Mr. Toro is our Lead Industrial Design Engineer and is a key member of the development team for the Pūrgo air purification and disinfection product development project. Currently the director of Industrial Design at IPS, Mr. Toro has more than 20 years of experience developing award winning innovative solutions for consumer and professional products. Mr. Toro directed the design of products ranging from miniature motion control solutions for B/E Aerospace and medical clients to household appliances for Applica Black and Decker. Mr. Toro holds a Bachelor of Science degree in Industrial Design from the University of Bridgeport. Mr. Toro's team has worked closely with Mr. Krosney in the design of PūrgoLift, AeroClean's elevator implementation product line.

Structure of our Board of Directors

The Board consists of six directors, and each director's term expires at each annual meeting of stockholders.

Director Independence

The Board has determined that Dr. Helfet, Messrs. McCaffrey, Scannell and Senft and Ms. Floyd are each an "independent director" under the Nasdaq listing rules, which is defined generally as a person other than an officer or employee of the company or its subsidiaries or any other individual having a relationship that, in the opinion of the company's board of directors, would interfere with the director's exercise of independent judgment in carrying out the responsibilities of a director.

Committees

The Board has three standing Committees: the Audit Committee; the Compensation Committee; and the Nominating and Corporate Governance Committee.

Audit Committee. Our Audit Committee is a separately designated standing audit committee established in accordance with Section 3(a)(58)(A) of the Exchange Act. The Audit Committee is composed of Ms. Floyd and Messrs. McCaffrey and Senft, with Ms. Floyd serving as chair. Our Board has determined that Ms. Floyd and Mr. McCaffrey are each "financially sophisticated audit committee members" and "audit committee financial experts" in accordance with the Nasdaq listing rules and SEC rules, respectively. All members of the Audit Committee are independent under Nasdaq listing standards and SEC rules. The Audit Committee operates under a written charter adopted and approved by our Board.

The Audit Committee is responsible for: (i) the appointment, compensation and oversight of our independent auditors; (ii) overseeing the quality and integrity of our financial statements and related disclosures; (iii) overseeing our compliance with legal and regulatory requirements; (iv) assessing our independent auditors' qualifications, independence and performance; and (v) monitoring the performance of our internal audit and control functions.

Compensation Committee. The Compensation Committee is currently composed of Messrs. McCaffrey, Scannell and Senft, Ms. Floyd and Dr. Helfet, with Mr. McCaffrey serving as chair. All of the members of the Compensation Committee are independent as defined by Nasdaq listing rules and are non-employee directors. The Compensation Committee provides recommendations to the Board regarding compensation matters and oversees the Company's incentive and compensation plans. The Compensation Committee operates under a written charter adopted and approved by our Board.

The Compensation Committee has the power to delegate its authority and duties to subcommittees or individual members of the Compensation Committee or, to the extent permitted by the terms of any plan, to officers of our Company or other persons, in each case as it deems appropriate in accordance with applicable laws and regulations and the requirements of Nasdaq. Management input is taken into consideration in assessing the performance and pay levels of our key management employees as well as the establishment of bonus measures and targets, but ultimate decision-making regarding compensation of our named executive officers remains with the Compensation Committee.

Nominating and Corporate Governance Committee. The Nominating and Corporate Governance Committee is composed of Messrs. McCaffrey, Scannell and Senft, Ms. Floyd and Dr. Helfet, with Mr. Scannell serving as chair. All of the members of the Nominating and Corporate Governance Committee are independent as defined by the Nasdaq listing rules. The Nominating and Corporate Governance Committee is responsible for, among other things:

- Assisting the Board by actively identifying individuals qualified to become Board members.
- Recommending to the Board the director nominees for election at the next annual meeting of stockholders.
- Making recommendations with respect to corporate governance matters.

The Nominating and Corporate Governance Committee operates under a written charter adopted and approved by our Board. Under our Nominating and Corporate Governance Committee Charter, the Committee must be informed by a director in advance of any director accepting an invitation to serve on another public company board. The Committee will inform the Chairman of the Board of any such information. In addition, no director may sit on the board of directors, or beneficially own more than 1% of the outstanding equity securities, of any of the Company's competitors in the Company's principal lines of business.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

Other than compensation arrangements described in in our Annual Report on Form 10-K/A under the caption "Management," the following is a description of each transaction for the two most recently completed fiscal years, as well as the current fiscal year, to which we were a party or will be a party, in which:

- the amounts involved exceeded or will exceed the lesser of $120,000 or 1% of the average of our total assets at year-end for the last two completed fiscal years; and
- any of our directors, executive officers or holders of more than 5% of any class of our voting securities, or any member of the immediate family of the foregoing persons, had or will have a direct or indirect material interest.

Our Chairman, Dr. Khoury, owns 50% of the limited liability company that is the landlord for our corporate headquarters. Annual rent under our lease is $260,000, increasing 2.5% on each anniversary. The lease term is 10 years beginning from March 1, 2021. As of March 31, 2022, the Company's remaining payments under the lease approximated $2,610,000.

In May 2020, we issued 2,000,000 of our Class A units in a private placement to our existing members for total consideration of $2,000,000, or approximately $1.00 per Class A unit, of which $1,937,641 was for cash and $62,359 was in exchange for services provided. Our Chairman contributed $1,115,941 in exchange for 1,115,941 Class A units. Dr. Helfet contributed an aggregate of $157,500 ($61,700 of which was the conversion of an outstanding loan to the Company and the balance in cash) in exchange for 157,500 units. Dateline TV Holdings, Inc., a corporation controlled by Dr. Helfet's brother, Tim Helfet, contributed $93,600 in exchange for 93,600 Class A units. Mr. Krosney was issued 62,359 Class A units in exchange for services provided to the Company. Lewis Pell contributed $256,600 in exchange for 256,600 Class A units.

In September 2020, we sold 2,081,578 Class A units in a private placement to our existing members at $1.00 per Class A unit for total consideration of $2,081,578. Our Chairman purchased 1,500,000 Class A units for $1,500,000, Dateline TV Holdings, Inc. purchased 199,978 Class A units for $199,978 and Lewis Pell purchased 256,600 Class A units for $256,600.

In December 2020, we sold 2,000,000 Class A units in a private placement to our existing members at $1.00 per Class A unit for total consideration of $2,000,000. Our Chairman purchased 843,243 Class A units for $843,243, Julie Khoury, the wife of our Chairman, purchased 100,000 Class A units for $100,000, Dr. Helfet purchased 323,187 Class A units for $323,187, Dateline TV Holdings, Inc. purchased 201,086 Class A units for $201,086, Lewis Pell purchased 126,999 Class A units for $126,999 and Mr. McCaffrey purchased 40,812 Class A units for $40,812.

In March 2021, we sold 5,073,056 Class A units in a private placement to our existing members at $1.00 per Class A unit for total consideration of $5,073,056. In connection with this sale, our Chairman purchased 2,929,730 Class A units for $2,929,730, Dateline TV Holdings, Inc. purchased 603,259 Class A units for $603,259, Lewis Pell purchased 790,067 Class A units for $790,067 and Mr. McCaffrey purchased 400,000 Class A units for $400,000. In connection with our IPO, we reorganized our corporate structure to become a Delaware corporation by converting the Class A units of AeroClean Technologies, LLC into shares of AeroClean Technologies, Inc. common stock at a conversion ratio of 0.8462 shares of common stock for each Class A unit.

In July and August 2021, eight Pūrgo units were sold at current market prices to an entity in which our Chairman has a financial interest.

On September 30, 2021 we borrowed $500,000, and on November 5, 2021, we borrowed an additional $500,000 from our Chairman at an interest rate equal to the prime rate plus 3.0% per annum, which was 6.25% for the life of the loan, with principal and accrued interest due upon demand. On December 1, 2021, the Company repaid approximately $1,000,000 out of the net proceeds from the IPO in connection with the full satisfaction and discharge of the loan.

Upon the completion of the IPO, we entered into a registration rights agreement with our Chairman and each of our other stockholders that held 10% or more of our outstanding shares of common stock upon completion of the IPO. The registration rights agreement provides (x) our Chairman with "demand" registration and customary "piggyback" registration rights and (y) our other stockholders party to the registration rights agreement with customary "piggyback" registration rights. The registration rights agreement also provides that we will pay certain expenses relating to such registrations and indemnify the registration rights holders against certain liabilities that may arise under the Securities Act.

PRINCIPAL STOCKHOLDERS

The following table and notes thereto set forth certain information with respect to the beneficial ownership of the Company's capital stock as of July 1, 2022, except as otherwise noted, by (i) each person who is known to us to beneficially own more than 5% of the outstanding shares of common stock of the Company, (ii) each of the Company's named executive officers, (iii) each of the Company's directors and (iv) all of the Company's executive officers and directors as a group.

We have determined beneficial ownership in accordance with SEC rules, and the information is not necessarily indicative of beneficial ownership for any other purpose. Except as indicated in the footnotes below, we believe, based on the information furnished to us, that the persons and entities named in the table below have sole voting and investment power with respect to all shares of common stock that they beneficially own, subject to applicable community property laws.

The column entitled "Percentage of Shares Beneficially Owned" is based on 15,408,828 shares of common stock outstanding as of July 1, 2022. In computing the number of shares of common stock beneficially owned by a person or entity and the percentage ownership of that person or entity, we deemed to be outstanding all shares of common stock subject to restricted stock units held by that person or entity that are currently exercisable or that will become exercisable within 60 days of July 1, 2022. We did not deem these shares outstanding, however, for the purpose of computing the percentage ownership of any other person or entity. Unless otherwise indicated, the address of each beneficial owner listed in the table below is c/o AeroClean Technologies, Inc., 10455 Riverside Drive, Palm Beach Gardens, FL 33410.

Name of Beneficial Owner	Shares Beneficially Owned	Percentage of Shares Beneficially Owned
5% Stockholders		
Lewis Pell[(1)]	1,569,060	10.2%
Dateline TV Holdings, Inc.[(2)]	1,198,062	7.8%
Armistice Capital Master Fund Ltd.[(3)]	1,500,000	9.7%
Northeastern University[(4)]	1,500,000	9.7%
Named Executive Officers and Directors		
Amin J. Khoury[(5)]	4,119,793	26.7%
David Helfet, M.D.[(6)]	759,590	4.9%
Mark Krosney	256,728	1.7%
Michael Senft[(7)]	37,862	*
Thomas P. McCaffrey[(8)]	186,509	1.2%
Heather Floyd[(9)]	—	—
Timothy Scannell[(10)]	—	—
Jason DiBona[(11)]	—	—
Ryan Tyler[(12)]	—	—
All Executive Officers and Directors as a Group (9 persons)	5,360,482	34.8%

(1) Based solely on information reported in a Schedule 13G, filed with the SEC on February 14, 2022 by Mr. Pell. As reported in such filing, Mr. Pell has sole voting power with respect to 1,569,060 shares and sole dispositive power with respect to 1,569,060 shares.

(2) Based solely on information reported in a Schedule 13G/A, filed with the SEC on May 11, 2022 by Dateline TV Holdings, Inc. As reported in such filing, Dateline TV Holdings Inc. has sole voting power with respect to 1,198,062 shares and sole dispositive power with respect to 1,198,062 shares. Timothy Helfet has voting and investment power over the shares held by Dateline TV Holdings, Inc. The principal business address of Dateline TV Holdings, Inc. is 207 River Park Drive, Great Falls, VA 22006. Timothy Helfet is the brother of David Helfet.

(3) The shares of common stock reported herein are held by the Armistice Capital Master Fund Ltd. (the "Master Fund") and may be deemed to be indirectly beneficially owned by (i) Armistice Capital, LLC ("Armistice Capital"), as the investment manager of the Master Fund, and (ii) Steven Boyd, as the Managing Member of Armistice Capital. Armistice Capital and Steven Boyd disclaim beneficial ownership of the securities except to the extent of their respective pecuniary interests therein. Excludes 1,500,000 shares issuable upon the exercise of the warrant, which is subject to beneficial ownership limitations that prohibit the Master Fund from exercising any portion of those warrants if such exercise would result in the Master Fund owning a percentage of our outstanding common stock exceeding 4.99% after giving effect to the issuance of common stock in connection with the Master Fund's exercise of any portion of such warrant. The address of the Master Fund is c/o Armistice Capital, LLC, 510 Madison Avenue, 7th Floor, New York, NY 10022.

(4) Based solely on information reported in a Schedule 13G, filed with the SEC on July 11, 2022 by Northeastern University. As reported in such filing, Northeastern University has sole voting power with respect to 1,500,000 shares and sole dispositive power with respect to 1,500,000 shares. The principal business address of Northeastern University is 360 Huntington Ave, Boston, MA 02115.

(5) Excludes 97,959 shares of our common stock underlying restricted stock units that do not vest within 60 days of July 1, 2022.

(6) Excludes 84,436 shares of our common stock underlying restricted stock units that do not vest within 60 days of July 1, 2022.

(7) Excludes 97,959 shares of our common stock underlying restricted stock units that do not vest within 60 days of July 1, 2022.

(8) Excludes 95,555 shares of our common stock underlying restricted stock units that do not vest within 60 days of July 1, 2022. Does not include 186,508 shares of common stock held by the 2012 McCaffrey Family Trust.

(9) Excludes 95,555 shares of our common stock underlying restricted stock units that do not vest within 60 days of July 1, 2022.

(10) Excludes 92,289 shares of our common stock underlying restricted stock units that do not vest within 60 days of July 1, 2022.

(11) Excludes 436,860 shares of our common stock underlying restricted stock units that do not vest within 60 days of July 1, 2022.

(12) Excludes 231,050 shares of our common stock underlying restricted stock units that do not vest within 60 days of July 1, 2022.

DESCRIPTION OF CAPITAL STOCK

With respect to any of our shares held in book-entry form through The Depository Trust Company or any other share depositary, the depositary or its nominee will be the sole registered and legal owner of those shares, and references in this prospectus to any "stockholder" or "holder" of those shares means only the depositary or its nominee. Persons who hold beneficial interests in our shares through a depositary will not be registered legal owners of those shares and will not be recognized as such for any purpose. For example, only the depositary or its nominee will be entitled to vote the shares held through it, and any dividends or other distributions to be paid, and any notices to be given, in respect of those shares will be paid or given only to the depositary or its nominee. Owners of beneficial interest in those shares will have to look solely to the depositary with respect to any benefits of share ownership, and any rights they may have with respect to those shares will be governed by the rules of the depositary, which are subject to change from time to time. We have no responsibility for those rules or their application to any interests held through the depositary.

Authorized Capital Stock

Under our certificate of incorporation, our authorized capital stock consists of:

- 110,000,000 shares of common stock, par value $0.01 per share; and
- 11,000,000 shares of preferred stock, par value $0.01 per share.

The following is a description of the material terms of our certificate of incorporation and bylaws. We refer you to our certificate of incorporation and bylaws, copies of which have been filed with the SEC as exhibits to our registration statement of which this prospectus forms a part.

Common Stock

Dividend Rights. Subject to the rights, if any, of the holders of any outstanding series of our preferred stock, holders of our common stock will be entitled to receive dividends out of any of our funds legally available when, as and if declared by the Board.

Voting Rights. Each holder of our common stock is entitled to one vote per share on all matters on which stockholders are generally entitled to vote. Our certificate of incorporation does not provide for cumulative voting in the election of directors.

Liquidation. If we liquidate, dissolve or wind up our affairs, holders of our common stock are entitled to share proportionately in our assets available for distributions to stockholders, subject to the rights, if any, of the holders of any outstanding series of our preferred stock.

Other Rights. Holders of our common stock have no preemptive, subscription, redemption or conversion rights. Any shares of common stock sold under this prospectus will be validly issued, fully paid and nonassessable upon issuance against full payment of the purchase price for such shares.

Preferred Stock

Under our certificate of incorporation and subject to the limitations prescribed by law, our Board may issue our preferred stock in one or more series and may establish from time to time the number of shares to be included in such series and may fix the designation, the voting powers, if any, and preferences and relative participating, optional or other rights, if any, of the shares of each such series and any qualifications, limitations or restrictions thereof. See "— Anti-Takeover Effects of Provisions of Our Certificate of Incorporation and Bylaws."

When and if we issue any shares of preferred stock, our Board will establish the number of shares and designation of such series and the voting powers, if any, and preferences and relative participating, optional or other special rights, and the qualifications, limitations and restrictions thereof, for the particular preferred stock series.

Dividends

We have not paid any cash dividends on our shares of common stock to date. The payment of cash dividends in the future will be dependent upon our revenues and earnings, if any, capital requirements and

general financial condition and will be within the discretion of our Board. It is the current intention of our Board to retain all earnings, if any, for use in our business operations and, accordingly, our Board does not anticipate declaring any dividends in the foreseeable future.

Warrant

On June 29, 2022, we issued a warrant to purchase up to 1,500,000 shares of our common stock at an exercise price of $11.00 per share. The warrant will be exercisable with respect to 1,261,650 shares beginning on the earlier of the effective date of this registration statement covering the shares of common stock underlying the warrant and September 27, 2022 (the "Initial Exercise Date"). The remainder of the warrant may be exercised upon receiving the requisite stockholder approval. The warrant must be exercised on or prior to 5:00 p.m. on the fifth-year anniversary of the Initial Exercise Date (which will be no later than September 27, 2027). The Selling Stockholder has contractually agreed to restrict its ability to exercise the warrant if the number of shares of the Company's common stock held by the Selling Stockholder and its affiliates after such exercise would exceed 4.99% of the then issued and outstanding shares of the Company's common stock. The Selling Stockholder may increase or decrease this limitation upon notice to the Company, but in no event will any such limitation exceed 9.99%.

Our Transfer Agent

The registrar and transfer agent for our common stock is Computershare.

Listing

Our common stock is listed on Nasdaq under the symbol "AERC".

Anti-Takeover Effects of Provisions of our Certificate of Incorporation and Bylaws

Our certificate of incorporation and bylaws contain, and Delaware statutory law contains, provisions that could make the acquisition of our Company by means of a tender offer, a proxy contest or otherwise more difficult. These provisions are expected to discourage certain types of coercive takeover practices and takeover bids that our Board may consider inadequate and to encourage persons seeking to acquire control of us to first negotiate with our Board. We believe that the benefits of increased protection of our ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure us outweigh the disadvantages of discouraging takeover or acquisition proposals because, among other things, negotiation of these proposals could result in an improvement of their terms. The description set forth below is only a summary and is qualified in its entirety by reference to our certificate of incorporation and our bylaws, both of which are filed as exhibits to our registration statement of which this prospectus forms a part.

Number of Directors; Filling Vacancies; Removal. Our certificate of incorporation and bylaws provide that our business and affairs will be managed by or under the direction of our Board. Our certificate of incorporation and bylaws provide that the Board will consist of not less than three nor more than nine members, with the exact number of directors within these limits to be fixed exclusively by the Board. In addition, our certificate of incorporation provides that any Board vacancy, including a vacancy resulting from an increase in the number of directors, may be filled solely by the affirmative vote of a majority of the remaining directors then in office, even if less than a quorum of the Board, or by the sole remaining director.

Special Meetings. Our certificate of incorporation and bylaws provide that special meetings of the stockholders may only be called by our Board or certain of our officers. These provisions will make it more difficult for stockholders to take an action opposed by our Board.

No Stockholder Action by Written Consent Unless Approved by Our Board. Our certificate of incorporation and bylaws require that all actions to be taken by stockholders must be taken at a duly called annual or special meeting, and stockholders will not be permitted to act by written consent unless both the action and the taking of the action by written consent are approved in advance by our Board. These provisions may make it more difficult for stockholders to take an action opposed by our Board.

Amendments to Our Certificate of Incorporation. Our certificate of incorporation provides that the affirmative vote of the holders of at least 66% of the total voting power of the then-outstanding shares of common stock entitled to vote, voting as a single class, is required to amend or repeal, or adopt any provision inconsistent with, certain provisions in our certificate of incorporation, including those provisions regarding the filling of vacancies on the Board, provisions providing for the removal of directors, provisions regarding the calling of special meetings, provisions regarding stockholder action by written consent and provisions regarding amendment of our certificate of incorporation. These provisions may make it more difficult for stockholders to make changes to our certificate of incorporation.

Amendments to Our Bylaws. Our certificate of incorporation provides that our Board has the power to adopt, amend or repeal the bylaws. Any such adoption, amendment or repeal of our bylaws by the Board shall require approval of a majority of the entire Board. Our certificate of incorporation provides that, notwithstanding any other provision of our certificate of incorporation, the affirmative vote of the holders of at least 66% of the total voting power of the then-outstanding shares of common stock entitled to vote, voting as a single class, is required for our stockholders to amend or repeal, or adopt any provisions in the bylaws. These provisions may make it more difficult for stockholders to make changes to our bylaws that are opposed by our Board.

Requirements for Advance Notification of Stockholder Nomination and Proposals. Under our bylaws, stockholders of record may nominate persons for election to our Board or bring other business constituting a proper matter for stockholder action at annual meetings only by providing proper notice to our secretary. Proper notice must be generally received not less than 90 days nor more than 120 days prior to the first anniversary date of the annual meeting for the preceding year (or, in some cases, prior to the tenth day following the announcement of the meeting) and must include, among other information, the name and address of the stockholder giving the notice, certain information relating to each person whom such stockholder proposes to nominate for election as a director and a brief description of any business such stockholder proposes to bring before the meeting. Nothing in our bylaws may be deemed to affect any rights of stockholders to request inclusion of proposals in our proxy statement pursuant to Rule 14a-8 under the Exchange Act. Contests for the election of directors or the consideration of stockholder proposals will be precluded if the proper procedures are not followed. Third parties may therefore be discouraged from conducting a solicitation of proxies to elect their own slate of directors or to approve their own proposals.

Forum and Venue. Our bylaws provide that, unless we otherwise consent in writing to the selection of an alternative forum, the sole and exclusive forum for certain legal actions involving the Company will be the Court of Chancery of the State of Delaware (or, if the Court of Chancery of the State of Delaware lacks subject matter jurisdiction, the federal district court for the District of Delaware).

In addition, certain provisions in our outstanding warrant could make it more difficult or expensive for a third party to acquire us. Upon the occurrence of certain transactions constituting a "fundamental transaction," the warrant will become exercisable for the merger consideration payable in connection with such fundamental transaction and the surviving entity will be required to assume our obligations under the warrant. The holder of the warrant will also be able to require the Company to repurchase the warrant at its then-fair market value. These and other provisions of our outstanding warrant could make it more difficult or expensive for a third party to acquire us even where the acquisition could be beneficial to you.

PRIVATE PLACEMENT OF SHARES OF COMMON STOCK AND WARRANTS

On June 26, 2022, we entered into a Securities Purchase Agreement (the "Purchase Agreement") with the Selling Stockholder pursuant to which we agreed to sell 1,500,000 shares of the Company's common stock, and a warrant to purchase 1,500,000 shares of the Company's common stock, for an aggregate purchase price of $15,000,000 (the "Private Placement"). The Purchase Agreement contains customary representations, warranties and agreements by the Company, customary conditions to closing and indemnification obligations of the Company and the Selling Stockholder. The closing of the Private Placement occurred on June 29, 2022 (the "Closing Date").

As part of the Private Placement, the Company issued to the Selling Stockholder a warrant to purchase up to 1,500,000 shares of the Company's common stock at a price of $11.00 per share. The warrant will be exercisable with respect to 1,261,650 shares beginning on the earlier of the effective date of a resale registration statement covering the shares of common stock underlying the warrant and September 27, 2022 (the "Initial Exercise Date"). The remainder of the warrant may be exercised upon receiving the requisite stockholder approval. The warrant must be exercised on or prior to 5:00 p.m. on the fifth-year anniversary of the Initial Exercise Date (which will be no later than September 27, 2027). The Selling Stockholder has contractually agreed to restrict its ability to exercise the warrant if the number of shares of our common stock held by the Selling Stockholder and its affiliates after such exercise would exceed 4.99% of the then issued and outstanding shares of our common stock. The Selling Stockholder may increase or decrease this limitation upon notice to us, but in no event will any such limitation exceed 9.99%.

In connection with the Private Placement, we entered into the Registration Rights Agreement with the Selling Stockholder. Pursuant to the Registration Rights Agreement, we were required to file a resale registration statement with the SEC in order to register the shares sold to the Selling Stockholder and the shares underlying the warrant for resale by no later than July 11, 2022. The Company is also required to use its best efforts to have such registration statement declared effective as promptly as practicable thereafter and in any event no later than 90 days thereafter in the event of a full review by the SEC. We will be obligated to pay certain liquidated damages to the Selling Stockholder if we fail to cause the registration statement to be declared effective by the SEC when required or fail to maintain the effectiveness of the registration statement pursuant to the terms of the Registration Rights Agreement.

SELLING STOCKHOLDER

The shares of common stock being offered by the Selling Stockholder are those previously issued to the Selling Stockholder and those issuable to the Selling Stockholder upon exercise of the warrant. For additional information regarding the issuances of these shares of common stock and warrant, see the section entitled "Private Placement of Shares of Common Stock and Warrants." We are registering the shares of common stock in order to permit the Selling Stockholder to offer the shares for resale from time to time. Except for the ownership of the shares of common stock and the warrant, the Selling Stockholder has not had any material relationship with us within the past three years.

The table below lists the Selling Stockholder and other information regarding the beneficial ownership of the shares of common stock owned by the Selling Stockholder. The second column lists the number of shares of common stock beneficially owned by the Selling Stockholder as of July 8, 2022. This number does not include any shares of common stock issuable upon the exercise of the warrant held by the Selling Stockholder on that date.

The third column lists the shares of common stock being offered by this prospectus by the Selling Stockholder.

In accordance with the terms of the Registration Rights Agreement, this prospectus generally covers the resale of the sum of (i) the number of shares of common stock issued to the Selling Stockholder as described in the section entitled "Private Placement of Shares of Common Stock and Warrants" and (ii) the maximum number of shares of common stock issuable upon exercise of the related warrants, determined as if the outstanding warrants were exercised in full as of the trading day immediately preceding the date this registration statement was initially filed with the SEC, without regard to any limitations on the exercise of the warrants.

The fourth and fifth columns assume the sale of all of the shares offered by the Selling Stockholder pursuant to this prospectus.

Under the terms of the warrant, the Selling Stockholder may not exercise the warrants to the extent such exercise would cause such Selling Stockholder, together with its affiliates and attribution parties, to beneficially own a number of shares of common stock which would exceed 4.99% of our then outstanding common stock following such exercise, excluding for purposes of such determination shares of common stock issuable upon exercise of such warrants which have not been exercised. The selling stockholder may sell all, some or none of their shares in this offering. See the section entitled "Plan of Distribution."

Name of Selling Stockholder	Number of shares of Common Stock Owned Prior to Offering	Maximum Number of Shares of Common Stock to be Sold Pursuant to this Prospectus	Number of Shares of Common Stock Owned After Offering	Percentage of Shares of Common Stock Owned After the Offering
Armistice Capital Master Fund Ltd. c/o Armistice Capital, LLC 510 Madison Avenue, 7th Floor New York, New York 10022	1,500,000[(1)]	3,000,000	0	0.0%

(1) The shares of common stock reported herein are held by the Armistice Capital Master Fund Ltd. (the "Master Fund") and may be deemed to be indirectly beneficially owned by (i) Armistice Capital, LLC ("Armistice Capital"), as the investment manager of the Master Fund, and (ii) Steven Boyd, as the Managing Member of Armistice Capital. Armistice Capital and Steven Boyd disclaim beneficial ownership of the securities except to the extent of their respective pecuniary interests therein. Excludes 1,500,000 shares issuable upon the exercise of the warrant, which is subject to beneficial ownership limitations that prohibit the Master Fund from exercising any portion of those warrants if such exercise would result in the Master Fund owning a percentage of our outstanding common stock exceeding 4.99% after giving effect to the issuance of common stock in connection with the Master Fund's exercise of any portion of such warrant.

PLAN OF DISTRIBUTION

The Selling Stockholder and any of its pledgees, assignees and successors-in-interest may, from time to time, sell any or all of the shares of common stock covered by this prospectus on Nasdaq or any other stock exchange, market or trading facility on which the shares of common stock are traded or in private transactions. These sales may be at fixed or negotiated prices. The Selling Stockholder may use any one or more of the following methods when selling securities:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the securities as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- settlement of short sales;
- in transactions through broker-dealers that agree with the Selling Stockholder to sell a specified number of such securities at a stipulated price per security;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- a combination of any such methods of sale; or
- any other method permitted pursuant to applicable law.

The Selling Stockholder may also sell securities under Rule 144 or any other exemption from registration under the Securities Act, if available, rather than under this prospectus.

Broker-dealers engaged by the Selling Stockholder may arrange for other brokers-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the Selling Stockholder (or, if any broker-dealer acts as agent for the purchaser of securities, from the purchaser) in amounts to be negotiated, but, except as set forth in a supplement to this prospectus, in the case of an agency transaction not in excess of a customary brokerage commission in compliance with FINRA Rule 2121 and in the case of a principal transaction a markup or markdown in compliance with FINRA Rule 2121.

In connection with the sale of the securities or interests therein, the Selling Stockholder may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the securities in the course of hedging the positions they assume. The Selling Stockholder may also sell securities short and deliver these securities to close out their short positions, or loan or pledge the securities to broker-dealers that in turn may sell these securities. The Selling Stockholder may also enter into option or other transactions with broker-dealers or other financial institutions or create one or more derivative securities which require the delivery to such broker-dealer or other financial institution of securities offered by this prospectus, which securities such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The Selling Stockholder and any broker-dealers or agents that are involved in selling the securities may be deemed to be "underwriters" within the meaning of the Securities Act in connection with such sales. In such event, any commissions received by such broker-dealers or agents and any profit on the resale of the securities purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. The Selling Stockholder has informed the Company that it does not have any written or oral agreement or understanding, directly or indirectly, with any person to distribute the securities.

The Company is required to pay certain fees and expenses incurred by the Company incident to the registration of the securities. The Company has agreed to indemnify the Selling Stockholder against certain losses, claims, damages and liabilities, including liabilities under the Securities Act.

We have agreed to keep this prospectus effective until the earlier of (i) the date on which the securities may be resold by the Selling Stockholder without registration and without regard to any volume or manner-of-sale limitations by reason of Rule 144, without the requirement for the Company to be in compliance with the current public information under Rule 144 under the Securities Act or any other rule of similar effect or (ii) all of the securities have been sold pursuant to this prospectus or Rule 144 under the Securities Act or any other rule of similar effect. The securities will be sold only through registered or licensed brokers or dealers if required under applicable state securities laws. In addition, in certain states, the securities covered hereby may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

Under applicable rules and regulations under the Exchange Act, any person engaged in the distribution of the securities may not simultaneously engage in market making activities with respect to the common stock for the applicable restricted period, as defined in Regulation M, prior to the commencement of the distribution. In addition, the Selling Stockholder will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including Regulation M, which may limit the timing of purchases and sales of the common stock by the Selling Stockholder or any other person. We will make copies of this prospectus available to the Selling Stockholder and have informed them of the need to deliver a copy of this prospectus to each purchaser at or prior to the time of the sale (including by compliance with Rule 172 under the Securities Act).

LEGAL MATTERS

The validity of the securities offered hereby will be passed upon for us by Freshfields Bruckhaus Deringer US LLP.

EXPERTS

The financial statements of AeroClean Technologies, Inc., incorporated by reference in this prospectus, have been so included in reliance upon the report of Citrin Cooperman & Company, LLP, independent registered public accountants, upon the authority of said firm as experts in accounting and auditing.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

We have filed with the SEC a registration statement on Form S-1 under the Securities Act with respect to the securities offered hereby. This prospectus, which constitutes a part of the registration statement, does not contain all of the information set forth in the registration statement or the exhibits and schedules filed with the registration statement. For further information about us and the securities offered hereby, we refer you to the registration statement and the exhibits filed with the registration statement. Statements contained in this prospectus regarding the contents of any contract or any other document that is filed as an exhibit to the registration statement are not necessarily complete, and each such statement is qualified in all respects by reference to the full text of such contract or other document filed as an exhibit to the registration statement. The SEC also maintains an internet website that contains reports, proxy statements and other information about registrants, like us, that file electronically with the SEC. The address of that website is *www.sec.gov*.

We are currently subject to reporting requirements under the Exchange Act. We are required to file annual reports containing financial statements audited by an independent public accounting firm, quarterly reports containing unaudited financial data, current reports, proxy statements and other information with the SEC pursuant to the Exchange Act. Our annual report for the fiscal year ended December 31, 2021, as well as each of our other reports filed with the SEC, can be inspected and copied at the public reference room and on the SEC's website referred to above.

We maintain a website at *www.aeroclean.com*, through which you may access these materials free of charge as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. Information contained on or accessed through our website is not a part of this prospectus and the inclusion of our website address in this prospectus is an inactive textual reference only.

INCORPORATION BY REFERENCE

The SEC allows us to "incorporate by reference" information from other documents that we file with it, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus. Information in this prospectus supersedes information incorporated by reference that we filed with the SEC prior to the date of this prospectus.

We incorporate by reference into this prospectus and the registration statement of which this prospectus is a part the information or documents listed below that we have filed with the SEC:

- our Annual Report on Form 10-K for the year ended December 31, 2021, filed with the SEC on April 1, 2022 (as amended on May 1, 2022);
- our Quarterly Report on Form 10-Q for the three months ended March 31, 2022, filed with the SEC on May 12, 2022;
- our Current Reports on Form 8-K filed with the SEC on May 12, 2022 and June 30, 2022; and
- the description of our common stock contained in our registration statement on Form 8-A filed with the SEC on November 19, 2021, including any amendments or reports filed for the purpose of updating this description.

In addition, all documents (other than current reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits filed on such form that are related to such items) that are filed by us with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of the initial registration statement of which this prospectus is a part and prior to the effectiveness of such registration statement and all documents subsequently filed by us pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act prior to the termination of the offering (excluding any information furnished rather than filed) shall be deemed to be incorporated by reference into this prospectus.

Notwithstanding the statements in the preceding paragraphs, no document, report or exhibit (or portion of any of the foregoing) or any other information that we have "furnished" to the SEC pursuant to the Exchange Act shall be incorporated by reference into this prospectus, unless otherwise stated therein.

We will furnish without charge to you, on written or oral request, a copy of any or all of the documents incorporated by reference in this prospectus, including exhibits to these documents. You should direct any requests for documents to AeroClean Inc., 10455 Riverside Drive, Palm Beach Gardens, FL 33410 or (833) 652-5326. You also may access these filings on our website at www.aeroclean.com. We do not incorporate the information on our website into this prospectus and you should not consider any information on, or that can be accessed through, our website as part of this prospectus (other than those filings with the SEC that we specifically incorporate by reference into this prospectus).

Any statement contained in a document incorporated or deemed to be incorporated by reference in this prospectus will be deemed modified, superseded or replaced for purposes of this prospectus to the extent that a statement contained in this prospectus modifies, supersedes or replaces such statement.

3,000,000 Shares of Common Stock Offered by the Selling Stockholder

PART II
INFORMATION NOT REQUIRED IN THE PROSPECTUS

Item 13. Other expenses of issuance and distribution

The following table sets forth all fees and expenses, other than the underwriting discounts and commissions payable solely by AeroClean in connection with the offer and sale of the securities being registered. All amounts shown are estimated except for the SEC registration fee.

	Amount to be paid
SEC registration fee	$ 3,526
Accounting fees and expenses	$10,000
Legal fees and expenses	75,000
FINRA filing fee	6,247
Total	$94,773

Item 14. Indemnification of directors and officers

Section 102 of the General Corporation Law of the State of Delaware permits a corporation to eliminate the personal liability of directors of a corporation to the corporation or its stockholders for monetary damages for a breach of fiduciary duty as a director, except where the director breached his duty of loyalty, failed to act in good faith, engaged in intentional misconduct or knowingly violated a law, authorized the payment of a dividend or approved a stock repurchase in violation of Delaware corporate law or obtained an improper personal benefit. Our certificate of incorporation provides that no director of AeroClean shall be personally liable to it or its stockholders for monetary damages for any breach of fiduciary duty as a director, notwithstanding any provision of law imposing such liability, except to the extent that the General Corporation Law of the State of Delaware prohibits the elimination or limitation of liability of directors for breaches of fiduciary duty.

Section 145 of the General Corporation Law of the State of Delaware provides that a corporation has the power to indemnify a director, officer, employee, or agent of the corporation, or a person serving at the request of the corporation for another corporation, partnership, joint venture, trust or other enterprise in related capacities against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with an action, suit or proceeding to which he was or is a party or is threatened to be made a party to any threatened, ending or completed action, suit or proceeding by reason of such position, if such person acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation, and, in any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful, except that, in the case of actions brought by or in the right of the corporation, no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or other adjudicating court determines that, despite the adjudication of liability but in view of all of the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

Our certificate of incorporation and bylaws provide indemnification for our directors and officers to the fullest extent permitted by the General Corporation Law of the State of Delaware. We will indemnify each person who was or is a party or threatened to be made a party to any threatened, pending or completed action, suit or proceeding (other than an action by or in the right of us) by reason of the fact that he or she is or was, or has agreed to become, a director or officer, or is or was serving, or has agreed to serve, at our request as a director, officer, partner, employee or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise (all such persons being referred to as an "Indemnitee"), or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred in connection with such action, suit or proceeding and any appeal therefrom, if such

Indemnitee acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, our best interests, and, with respect to any criminal action or proceeding, he or she had no reasonable cause to believe his or her conduct was unlawful. Our certificate of incorporation and bylaws provide that we will indemnify any Indemnitee who was or is a party to an action or suit by or in the right of us to procure a judgment in our favor by reason of the fact that the Indemnitee is or was, or has agreed to become, a director or officer, or is or was serving, or has agreed to serve, at our request as a director, officer, partner, employee or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise, or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees) and, to the extent permitted by law, amounts paid in settlement actually and reasonably incurred in connection with such action, suit or proceeding, and any appeal therefrom, if the Indemnitee acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, our best interests, except that no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to us, unless a court determines that, despite such adjudication but in view of all of the circumstances, he or she is entitled to indemnification of such expenses. Notwithstanding the foregoing, to the extent that any Indemnitee has been successful, on the merits or otherwise, he or she will be indemnified by us against all expenses (including attorneys' fees) actually and reasonably incurred in connection therewith. Expenses must be advanced to an Indemnitee under certain circumstances.

We maintain a general liability insurance policy that covers certain liabilities of directors and officers of our corporation arising out of claims based on acts or omissions in their capacities as directors or officers.

Item 15. Recent sales of unregistered securities

On June 26, 2022, we entered into the Purchase Agreement with the Selling Stockholder, pursuant to which we agreed to issue and sell in a private placement (i) an aggregate of 1,500,000 shares of our common stock, par value $0.01 per share, and (ii) a warrant to purchase up to 1,500,000 shares of our common stock, for an aggregate purchase price of $15,000,000. The Purchase Agreement contains customary representations, warranties and agreements by us, customary conditions to closing and indemnification obligations of the Selling Stockholder and us. The closing of the Private Placement occurred on June 29, 2022. The offer and sale of these securities was made pursuant to the exemption from registration provided by Section 4(a)(2) of the Securities Act and/or Regulation D promulgated thereunder.

Item 16. Exhibits and Financial Statement Schedules

Exhibit No.	Exhibit Description
3.1	Certificate of Incorporation (incorporated by reference to Exhibit 4.1 to the Company's Registration Statement on Form S-8 (File No. 333-261395), filed with the SEC on November 29, 2021).
3.2	Bylaws (incorporated by reference to Exhibit 4.2 to the Company's Registration Statement on Form S-8 (File No. 333-261395), filed with the SEC on November 29, 2021).
4.1	Form of Common Stock Certificate (incorporated by reference to Exhibit 3.1 to the Company's Offering Statement (File No. 024-11650), filed with the SEC on September 21, 2021, as amended).
4.2	Form of Share Purchase Option (incorporated by reference to Exhibit 3.2 of the Company's Offering Statement (File No. 024-11650), filed with the SEC on September 21, 2021, as amended).
4.3	Form of Warrant (incorporated by reference into Exhibit 4.1 on the Company's Current Report on Form 8-K, filed with the SEC on June 30, 2022).
5.1*	Legal opinion of Freshfields Bruckhaus Deringer US LLP
10.1	Form of Registration Rights Agreement (incorporated by reference to Exhibit 3.3 to the Company's Offering Statement (File No. 024-11650), filed with the SEC on September 21, 2021, as amended).

Exhibit No.	Exhibit Description
10.2	AeroClean Technologies, Inc. 2021 Incentive Award Plan (incorporated by reference to Exhibit 99.1 to the Company's Registration Statement on Form S-8 (File No. 333-261396), filed with the SEC on November 29, 2021).
10.3	Consultant Agreement, dated as of May 1, 2020, between CleanCo Bioscience Group LLC and Jason DiBona (incorporated by reference to Exhibit 6.2 of the Company's Offering Statement (File No. 024-11650), filed with the SEC on September 21, 2021, as amended).
10.4	Executive Employment Agreement, dated as of November 1, 2020, between AeroClean Technologies, LLC and Jason DiBona (incorporated by reference to Exhibit 6.3 of the Company's Offering Statement (File No. 024-11650), filed with the SEC on September 21, 2021, as amended).
10.4.1	Amendment to Executive Employment Agreement, dated as of May 1, 2021, by and between AeroClean Technologies, LLC and Jason DiBona (incorporated by reference to Exhibit 6.3.1 of the Company's Offering Statement (File No. 024-11650), filed with the SEC on September 21, 2021, as amended).
10.5	Confidentiality, Non-Competition, Non-Solicitation and Inventions Assignment Agreement, dated as of November 1, 2020, by and between AeroClean Technologies, LLC and Jason DiBona (incorporated by reference to Exhibit 6.4 of the Company's Offering Statement (File No. 024-11650), filed with the SEC on September 21, 2021, as amended).
10.6	Executive Employment Agreement, dated as of November 1, 2020, between AeroClean Technologies, LLC and Ryan Tyler (incorporated by reference to Exhibit 6.5 of the Company's Offering Statement (File No. 024-11650), filed with the SEC on September 21, 2021, as amended).
10.6.1	Amendment to Executive Employment Agreement, dated as of May 1, 2021, by and between AeroClean Technologies, LLC and Ryan Tyler (incorporated by reference to Exhibit 6.5.1 of the Company's Offering Statement (File No. 024-11650), filed with the SEC on September 21, 2021, as amended).
10.7	Confidentiality, Non-Competition, Non-Solicitation and Inventions Assignment Agreement, dated as of November 1, 2020, by and between AeroClean Technologies, LLC and Ryan Tyler (incorporated by reference to Exhibit 6.6 of the Company's Offering Statement (File No. 024-11650), filed with the SEC on September 21, 2021, as amended).
10.8	AeroClean Technologies, Inc. Employee Stock Purchase Plan (incorporated by reference to Exhibit 99.2 to the Company's Registration Statement on Form S-8 (File No. 333-261396), filed with the SEC on November 29, 2021).
10.9	AeroClean Technologies, Inc. Non-Employee Directors Stock and Deferred Compensation Plan (incorporated by reference to Exhibit 99.3 to the Company's Registration Statement on Form S-8 (File No. 333-261396), filed with the SEC on November 29, 2021).
10.10	AeroClean Technologies, Inc. 2021 Deferred Compensation Plan (incorporated by reference to Exhibit 99.3 to the Company's Registration Statement on Form S-8 (File No. 333-261395), filed with the SEC on November 29, 2021).
10.11	Form of Restricted Stock Unit Agreement (Directors) (incorporated by reference to Exhibit 6.10 to the Company's Offering Statement (File No. 024-11650), filed with the SEC on September 21, 2021, as amended).
10.12	Form of Restricted Unit Agreement (incorporated by reference to Exhibit 6.11 to the Company's Offering Statement (File No. 024-11650), filed with the SEC on September 21, 2021, as amended).
10.13#	Form of Securities Purchase Agreement (incorporated by reference into Exhibit 10.1 on the Company's Current Report on Form 8-K, filed with the SEC on June 30, 2022).
10.14	Form of Registration Rights Agreement (incorporated by reference into Exhibit 10.2 on the Company's Current Report on Form 8-K, filed with the SEC on June 30, 2022).

Exhibit No.	Exhibit Description
10.15	Form of Stockholders Letter Agreement (incorporated by reference into Exhibit 10.3 on the Company's Current Report on Form 8-K, filed with the SEC on June 30, 2022).
23.1*	Consent of Citrin Cooperman & Company, LLP.
23.2*	Consent of Freshfields Bruckhaus Deringer US LLP (included in Exhibit 5.1).
24.1*	Power of Attorney (included on signature page)
107*	Filling Fee Table

* Included in the Registration Statement on Form S-1, as initially filed with the SEC on July 11, 2022.

\# The schedules and annexes (and similar attachments) to this exhibit have been omitted from this filing pursuant to Item 601(b)(10) of Regulation S-K. The registrant agrees to furnish a supplemental copy of any omitted schedule (or similar attachment) to the SEC upon request.

Item 17. Undertakings

(a) The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by section 10(a)(3) of the Securities Act;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement.

(2) That, for the purposes of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of the securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) That, for the purpose of determining liability under the Securities Act to any purchaser, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

(b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to section 13(a) or section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in this registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction, the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized in the City of Palm Beach Gardens, State of Florida, on July 20, 2022.

AEROCLEAN TECHNOLOGIES, INC.

By: /s/ Jason DiBona

Jason DiBona
Chief Executive Officer
(Principal Executive Officer)

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Jason DiBona Jason DiBona	Chief Executive Officer *(Principal Executive Officer)*	July 20, 2022
/s/ Ryan Tyler Ryan Tyler	Chief Financial Officer *(Principal Financial Officer)*	July 20, 2022
* Amin J. Khoury, PhD (Hon)	Chairman of the Board	July 20, 2022
* David Helfet, M.D.	Director	July 20, 2022
* Michael Senft	Director	July 20, 2022
* Thomas P. McCaffrey	Director	July 20, 2022
* Heather Floyd	Director	July 20, 2022
* Timothy J. Scannell	Director	July 20, 2022

*By: /s/ Jason DiBona

Jason DiBona
Attorney-In-Fact