UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 10-K

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

For the fiscal year ended December 31, 2022

OR

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

FOR THE TRANSITION PERIOD FROM _____ TO _____

COMMISSION FILE NUMBER 001-39384

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

Delaware	**87-2678169**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification Number)**
78 Fourth Avenue Waltham, Massachusetts	**02451**
(Address of principal executive offices)	**(Zip Code)**

Registrant's telephone number, including area code: (617) 868-1700

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

Title of each class	Trading Symbols	Name of each exchange on which registered
Class A common stock, $0.0001 par value per share	**RBOT**	**The New York Stock Exchange**
Warrants to purchase one share of Class A common stock, each at an exercise price of $11.50 per share	**RBOT WS**	**The New York Stock Exchange**

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☐ No ☒

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☒ No ☐

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

Indicate by check mark whether the registrant (1) has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to file such reports) and has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

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

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

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

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☐

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements. ☐

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b). ☐

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

The aggregate market value of the registrant's voting and non-voting equity held by non-affiliates of the registrant (without admitting that any person whose securities are not included in such calculation is an affiliate) computed by reference to the price at which the Class A common stock was last sold as of June 30, 2022, the last business day of the registrant's most recently completed second fiscal quarter, was approximately $299.6 million.

As of February 5, 2023, the registrant had 106,332,173 shares of Class A common stock outstanding and 19,623,668 shares of Class B common stock outstanding.

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DOCUMENTS INCORPORATED BY REFERENCE

The following documents (or parts thereof) are incorporated by reference into the following parts of this Form 10-K: Certain information required in Part III of this Annual Report on Form 10-K is incorporated by reference from the Registrant's Proxy Statement for the 2023 Annual Meeting of Stockholders to be filed with the Securities and Exchange Commission.

EXPLANATORY NOTE

In this Annual Report on Form 10-K, the terms "we," "us," "our," the "Company" and "Vicarious Surgical" mean Vicarious Surgical Inc. (formerly D8 Holdings Corp.) and our subsidiaries. On September 17, 2021 (the "Closing Date"), D8 Holdings Corp., a Delaware corporation that was previously a Cayman Islands exempted company ("D8" and after the Business Combination described herein, the "Company") that migrated to and domesticated (the "Domestication"), consummated the previously announced business combination (the "Business Combination") pursuant to the terms of the Agreement and Plan of Merger, dated as of April 15, 2021 (the "Business Combination Agreement"), by and among D8, Snowball Merger Sub, Inc., a Delaware corporation ("Merger Sub"), and Vicarious Surgical Inc., a Delaware corporation ("Legacy Vicarious"). Immediately upon the consummation of the Business Combination, the Domestication and the other transactions contemplated by the Business Combination Agreement (collectively, the "Transactions", and such completion, the "Closing"), Merger Sub merged with and into Legacy Vicarious, with Legacy Vicarious surviving the Business Combination as a wholly-owned subsidiary of D8 (the "Merger"). In connection with the Transactions, D8 changed its name to "Vicarious Surgical Inc." and Legacy Vicarious changed its name to "Vicarious Surgical US Inc."

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K includes forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), that relate to future events, our future operations or financial performance, or our plans, strategies and prospects. These statements are based on the beliefs and assumptions of our management team. Although we believe that our plans, intentions and expectations reflected in or suggested by these forward-looking statements are reasonable, we cannot assure that we will achieve or realize these plans, intentions or expectations. Forward-looking statements are inherently subject to risks, uncertainties and assumptions. Generally, statements that are not historical facts, including statements concerning possible or assumed future actions, business strategies, events or performance, are forward-looking statements. These statements may be preceded by, followed by or include the words "believes," "estimates," "expects," "projects," "forecasts," "may," "will," "should," "seeks," "plans," "scheduled," "anticipates" or "intends" or the negative of these terms, or other comparable terminology intended to identify statements about the future, although not all forward-looking statements contain these identifying words. The forward-looking statements are based on projections prepared by, and are the responsibility of, our management team. Forward-looking statements contained in this Annual Report on Form 10-K include, but are not limited to, statements about:

- the ability to recognize the benefits of the Business Combination, which may be affected by, among other things, competition and our ability to grow and manage growth profitably and retain our key employees;
- the ability to maintain the listing of our Class A common stock on the New York Stock Exchange ("NYSE");
- the success, cost and timing of our product and service development activities;
- the commercialization and adoption of our initial product candidates and the success of our single-port surgical robot, called the Vicarious Surgical System, and any of our future product candidates and service offerings;
- the potential attributes and benefits of the Vicarious Surgical System and any of our other product and service offerings once commercialized;
- our ability to obtain and maintain regulatory authorization for the Vicarious Surgical System and our product and service offerings, and any related restrictions and limitations of any authorized product or service offering;

- changes in U.S. and foreign laws;
- our ability to identify, in-license or acquire additional technology;
- our ability to maintain our existing license agreements and manufacturing arrangements;
- our ability to compete with other companies currently marketing or engaged in the development of products and services for use in ventral hernia repair procedures and additional surgical applications;
- the size and growth potential of the markets for the Vicarious Surgical System and any of our future product and service offerings, and the ability of each to serve those markets once commercialized, either alone or in partnership with others;
- our estimates regarding expenses, future revenue, capital requirements and needs for additional financing;
- our ability to raise financing in the future;
- our financial performance;
- our intellectual property rights and how failure to protect or enforce these rights could harm our business, results of operations and financial condition;
- economic downturns and political and market conditions beyond our control and their potential to adversely affect our business, financial condition and results of operations;
- the anticipated continued impact of the COVID-19 pandemic on our business; and
- other factors detailed under the section titled "*Risk Factors*."

These forward-looking statements are based on information available as of the date of this report, and current expectations, forecasts and assumptions, and involve a number of judgments, risks and uncertainties. Important factors could cause actual results, performance or achievements to differ materially from those indicated or implied by forward-looking statements such as those described under the caption "Risk Factors" in Item 1A of Part I of this Annual Report on Form 10-K and in other filings that we make with the Securities and Exchange Commission. The risks described under the heading "Risk Factors" are not exhaustive. New risk factors emerge from time to time, and it is not possible to predict all such risk factors, nor can we assess the impact of all such risk factors on our business or the extent to which any factor or combination of factors may cause actual results to differ materially from those contained in any forward-looking statements. Forward-looking statements are not guarantees of performance. You should not put undue reliance on these statements, which speak only as of the date hereof. All forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by the foregoing cautionary statements. We undertake no obligations to update or revise publicly any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

SUMMARY OF RISK FACTORS

We are providing the following summary of the risk factors contained in this Annual Report on Form 10-K to enhance the readability and accessibility of our risk factor disclosures. The risk factors described below are a summary of the principal risk factors associated with an investment in us. These are not the only risks we face. You should carefully review the full risk factors contained in this Annual Report on Form 10-K in their entirety for additional information regarding the material factors that make an investment in our securities speculative or risky. These risks and uncertainties include, but are not limited to, the following:

- We have a limited operating history on which to assess the prospects for our business, we have not generated any revenue from sales of our product candidates, and have incurred losses since inception. We anticipate that we will continue to incur significant losses for at least the next several years as we develop and commercialize our product candidates and applications.

- We may need to raise additional funding to develop and commercialize the Vicarious Surgical System and to expand our research and development efforts. This additional financing may not be available on acceptable terms, or at all. Failure to obtain this necessary capital when needed may force us to delay, limit or terminate our product commercialization or development efforts or other operations.

- We are a development stage company with a limited history of operations and no product candidates with marketing authorization in any jurisdiction, and we cannot assure you that we will ever have a commercialized product.

- Our success depends upon market acceptance of our product candidates, our ability to develop and commercialize our product candidates and additional applications and generate revenues, and our ability to identify new markets for our technology.

- We are highly dependent upon the continued contributions of our key personnel. The loss of their services could harm our business, and if we are unable to attract, recruit, train, retain, motivate and integrate key personnel, we may not achieve our goals.

- We have no experience in marketing and selling our product candidates and if we are unable to successfully commercialize our product candidates, our business and operating results will be adversely affected.

- We expect to generate an increasing portion of our revenue internationally in the future and may become subject to various additional risks relating to our international activities, which could adversely affect our business, operating results and financial condition.

- We rely on limited or sole suppliers for some of the materials and components used in our product candidates, and we may not be able to find replacements or immediately transition to alternative suppliers, which could have a material adverse effect on our business, financial condition, results of operations and reputation.

- If we do not successfully develop, optimize and operate our sales and distribution channels or we do not effectively expand and update infrastructure, our operating results and customer experience may be negatively impacted.

- If we are unable to establish and maintain adequate sales and marketing capabilities or enter into and maintain arrangements with third parties to sell and market our product candidates, our business may be harmed.

- The COVID-19 pandemic has and could continue to negatively affect various aspects of our business, which could have a material adverse effect on our business, financial condition, results of operations, or cash flows.

- We have identified a material weakness in our internal control over financial reporting. If we are unable to successfully remediate this material weakness in our internal control over financial reporting, we may not be able to report our financial condition or results of operations accurately or in a timely manner, which may adversely affect investor confidence in us and, as a result, materially and adversely affect our business and the value of our Class A common stock.

- We are subject to extensive government regulation, which could restrict the development, marketing, sale and distribution of our product candidates and technologies and could cause us to incur significant costs.

- There is no guarantee that the U.S. Food and Drug Administration (the "FDA") will grant marketing authorization for our product candidates or any of our future product candidates and technologies, and failure to obtain necessary marketing authorization for our current product candidates and our future product candidates and technologies would adversely affect our ability to grow our business.

- If we are unable to protect our intellectual property, our ability to maintain any technological or competitive advantage over our competitors and potential competitors would be adversely impacted, and our business may be harmed.

- We may need or may choose to obtain licenses from third parties to advance our research or allow commercialization of our current or future product candidates and technologies, and we cannot provide any assurances that we would be able to obtain such licenses.

- We and our partners may be sued for infringing the intellectual property rights of third parties. If that happens, such litigation would be costly and time consuming, and an unfavorable outcome in any such litigation could have a material adverse effect on our business.

- In addition to IP litigation risks (referenced above), we face the risk of product liability claims and may be subject to damages, fines, penalties and injunctions, among other things.

PART I

ITEM 1. BUSINESS.

The following discussion reflects the business of Vicarious Surgical, as currently embodied by Vicarious Surgical. Unless the context otherwise requires, all references in this section to the "Company", "we," "us" and "our" generally refer to Vicarious Surgical in the present tense or Vicarious Surgical from and after the Business Combination.

Overview

Prior to the Domestication and the Closing, we were a blank check company incorporated as a Cayman Islands exempted company and formed for the purpose of effecting a merger, capital stock exchange, asset acquisition, stock purchase, reorganization or similar business combination with one or more businesses. On September 16, 2021, we incorporated as a Delaware corporation in connection with the Domestication. On September 17, 2021, we completed the Business Combination pursuant to the Business Combination Agreement dated April 15, 2021 that we entered into with Legacy Vicarious. In connection with the transactions contemplated by the Business Combination, we changed our name to "Vicarious Surgical Inc." and the business of Legacy Vicarious became our business.

We are combining advanced miniaturized robotics, computer science and 3D visualization to build an intelligent and affordable, single-port surgical robot, called the Vicarious Surgical System, that virtually transports surgeons inside the patient to perform minimally invasive surgery. With our disruptive next-generation robotics technology, we are seeking to increase the efficiency of surgical procedures, improve patient outcomes and reduce healthcare costs. Led by a visionary team of engineers from the Massachusetts Institute of Technology, or MIT, we intend to deliver the next generation in robotic-assisted surgery, designed to solve the shortcomings of open surgery, and current laparoscopic and robot-assisted minimally invasive surgery. We have developed multiple prototypes, have had pre-submission meetings with the FDA to align on our regulatory strategy, and plan to file a de novo application with the FDA for use in ventral hernia procedures as our first indication.

The Vicarious Surgical System is uniquely designed to overcome the deficiencies that have limited broad adoption of robot-assisted minimally invasive surgery to date. By fundamentally engineering a better solution, we believe we have created a more capable surgical robot than those currently available on the market, and if authorized by the FDA, the Vicarious Surgical System will offer surgeons the ability to perform surgical procedures with greater dexterity and greater access to the entire abdomen, with better visibility and sensor-based feedback, through a small single incision in the abdomen. The Vicarious Surgical System features proprietary "de-coupled" actuators, which are intended to enable a cascade of benefits, including improved robotic mobility, reduced size, improved functionality and lower materials costs. The Vicarious Surgical System is designed to enable surgeons to perform procedures, if authorized by the FDA, inside the abdomen with human-equivalent motion, with a full nine degrees of freedom per robotic arm, providing an experience that is more natural, and more akin to the surgeon's own upper body movements. In surgical procedures conducted on cadavers, the Vicarious Surgical System provides exceptional reach within the abdomen, and if authorized by the FDA, it will enable the surgeon to enter the abdomen from nearly any angle and work in nearly any direction, without having to triangulate to the surgical area from multiple incisions or to operate only within the limited area directly in front of a single incision. The Vicarious Surgical System is designed to provide exceptional visualization, with a high-performance, stereoscopic camera that rotates in three degrees of freedom (yaw, pitch, and roll) to provide the surgeon with stereoscopic imaging of nearly every surface in the abdomen. The Vicarious Surgical System also contains 28 sensors per instrument arm, which allows the system to provide real-time feedback to the surgeon on force, motion and other key data that are intended to enhance surgical procedures and patient outcomes.

The Vicarious Surgical System is being developed to provide attractive advantages to hospitals and ambulatory surgical centers, or ASCs, which we believe will drive rapid and widespread adoption. Unlike the large footprints of legacy surgical robotic systems that require a construction build-out and a dedicated operating room, the Vicarious Surgical System is much smaller and could be easily moved to any operating room throughout a medical facility. We anticipate that, if authorized by the FDA, the smaller size and advanced engineering of the Vicarious Surgical System and related disposable instruments will be offered at a cost-effective price point compared to existing legacy robotic systems. Hospitals and ASCs would not be required to dedicate permanent space and would reduce expenses relating to sterilization and operating room turnover. We believe that, if authorized by the FDA, adoption of the Vicarious Surgical System could be facilitated by a streamlined training regimen, where surgeons will be able to develop proficiency much more quickly than for legacy robotic systems. This is due to the design features of the Vicarious Surgical System, such as the ease of use and more natural, human-equivalent motion of the Vicarious Surgical System, the reduced surgeon burden during setup, and the fact that the Vicarious Surgical System would not be confined to a dedicated operating suite and therefore could have more availability for training purposes. In addition, with its increased capability and dexterity, the Vicarious Surgical System is designed to enable many procedures to be performed faster and more effectively, with less injury and risk to the patient, significantly reducing overall healthcare costs. Because the Vicarious Surgical System has not yet been authorized by the FDA or commercialized, the intended advantages of the Vicarious Surgical System have not yet been realized and are dependent upon the successful development of the Vicarious Surgical System and a timely authorization by the FDA.

We estimate that there are 39 million soft tissue abdominal and gynecological surgical procedures performed annually worldwide that could be addressed with the Vicarious Surgical System, including use for ventral hernia, other types of hernia, hysterectomy, cholecystectomy (gall bladder) and certain other gastrointestinal procedures. We intend for use in ventral hernia procedures to be the first clinical application for the Vicarious Surgical System, of which there are estimated to be 4.1 million cases worldwide and 0.9 million in the U.S. annually. We then intend to seek FDA clearance or authorization to enable the expansion into the other applications addressable by the Vicarious Surgical System.

Industry Background

Despite the advancements in manual and robot-assisted minimally invasive surgery over the last 40 years, of the estimated 39 million annual worldwide procedures addressable by the Vicarious Surgical System, it is estimated that more than 50% are currently performed by open surgery and less than 5% are performed by existing robot-assisted minimally invasive surgery technologies today. The large incisions required for open surgery, while allowing the surgeon to see with their own eyes and operate with their own hands, create significant trauma to the patient, resulting in long hospitalization and recovery times, high hospitalization costs, as well as significant pain and suffering. Due to the significant trauma to the patient associated with open surgery, 15% to 20% of such surgeries result in tissue or internal organs pushing through the muscle into the abdomen, or incisional hernias, caused by the operation, requiring additional complex surgery to correct. Although there have been significant improvements in minimally invasive surgery procedures over open surgery, the following limitations associated with minimally invasive surgery still exist:

- Laparoscopic surgery results in improved patient outcomes, but it presents significant challenges for surgeons, primarily associated with using long, rigid instruments through multiple incisions across the abdominal wall, which introduces the “fulcrum effect” requiring the surgeon to adjust for the inversion and scaling of movements. These laparoscopic instruments are difficult to manipulate, have limited degrees of freedom, limited reach and reduced depth-perception and visibility, which requires significant coordination among the surgical team to perform the procedure.

- Multi-port robotic systems introduced in the early 2000s have managed to overcome some of the challenges associated with laparoscopy, but they require multiple incisions. While the wristed robotic instruments provide more dexterity than the long, rigid instruments used in laparoscopy, these robotic systems still require multiple systems and require the surgeon to define the workspace and kinematic motion profile of the robotic system for every procedure, based on where they create the incisions and where they intend to operate. Additionally, these systems are expensive and require a difficult learning-curve for surgeons. In addition, these systems are often underutilized because they have large footprints, limited portability and require extensive setup and longer operating room turnover time.

- More recently, single-port surgical robots have been developed, but these systems are limited in that they rely on legacy robotic architecture, and thus require a much larger incision than multi-port robotic systems, have limited motion, strength, and visualization, and can only operate in a small procedural area. Given the relatively large size of the trocar incision required to be made by the surgeon to accommodate existing single-port robotic systems, among other limitations, these existing single-port robots have unfortunately resulted in significantly higher rates of complications with higher levels of injury to the patient, with less capability for the surgeon. For all these reasons, legacy single-port robotic solutions, much like multi-port manual and robotic minimally invasive surgery, have received limited adoption to date.

We believe the slow adoption of robot-assisted surgery, estimated to be less than 5% of the estimated 39 million addressable abdominal soft-tissue surgical procedures performed worldwide annually, has occurred because of several factors, including the following:

- ***Significant Capital Investment.*** Legacy robotic systems require high upfront acquisition costs and burdensome annual service contracts that are often prohibitively expensive, especially in outpatient settings. We estimate these capital costs to be up to $2.0 million or more per system upfront, plus an additional 10% to 20% annually for maintenance and service contracts.

- ***Low Utilization.*** In addition to the significant acquisition costs, existing robotic systems create inefficiencies and increase costs to medical facilities considering adoption. Due to their large size and limited portability, existing robotic systems require the construction of a dedicated operating room, occupying valuable real estate within the hospital. Once in place, these robotic systems require extensive set-up and operating room turnover times, which limits the number of procedures that can be performed with the robotic system.

- ***Limited Capabilities.*** Existing robotic systems have limited capabilities and are ill-suited for many outpatient procedures. Due to their limited degrees of freedom inside the abdomen, they depend on significant, complicated, robotic motion outside the body, and they have limited ability to operate in multiple quadrants, difficulty operating on the "ceiling" of the abdomen, create collisions inside and outside of the patient's abdomen, and restrict overall access of the operating team to the patient.

- ***Difficult to Use.*** Existing robotic systems require the surgeon to develop an extensive procedure plan in advance to determine appropriate incision sites and angles for each procedure, in order to avoid collisions inside and outside of the patient's abdomen. Surgeons must develop this plan with fewer degrees of freedom than they would employ using open surgery, restricting their natural movements. To become proficient at manipulating these legacy robotic systems to perform the procedures they otherwise were trained to perform via open surgery requires extensive training and several dozen procedures on live patients. As these systems are maintained in dedicated, expensive, operating rooms, obtaining access to train on the system becomes a significant impediment to adoption, resulting in more open surgeries.

The Vicarious Surgical System

The single-port Vicarious Surgical System with advanced, miniaturized robotics and exceptional visualization is designed to address the significant limitations of open surgery and existing single- and multi-port robotic surgical approaches to improve patient outcomes and enhance adoption by hospitals and other medical facilities. The Vicarious Surgical System is designed with a fundamentally different architecture, and proprietary "de-coupled actuators," to overcome many of the limitations of open surgery or existing robot-assisted surgical procedures with a minimally invasive and more capable robotic system. This architecture enables unprecedented dexterity inside the abdomen through an ultra-thin support tube, providing significant improvement over existing legacy robotic systems and minimizing the complications and trauma associated with open surgery. The Vicarious Surgical System has not yet been authorized by the FDA. We have had pre-submission meetings with the FDA to align on our regulatory strategy and plan to file a de novo application with the FDA for use in ventral hernia procedures as our first indication.

(1) The Vicarious Surgical System is capable of incision sizes as low as 1.2cm. Current disposables require 1.8cm incisions. We are developing and expect to launch disposables requiring 1.5cm incisions.

The Vicarious Surgical System consists of the following components:

- ***Camera and Instrument Arms.*** The Vicarious Surgical System has a high-performance stereoscopic camera that, when combined with robotic motion, provides full 360-degree viewing capability and is being developed to continuously map the depth of the patient's body. The camera moves in any direction and, together with the instrument arms, based on cadaver studies, the Vicarious Surgical System is capable of operating in nearly every direction within the abdomen, including rotating back and operating around the trocar incision point, unlike any robotic system on the market today. The Vicarious Surgical System's surgical instrument arms each have nine degrees of movement, completely mimicking the degrees of freedom in the surgeon's own wrists, elbows and shoulders, providing for a more complete and more natural range of motion for the surgeon. While existing robotic systems are limited to operating in a small section directly in front of the rigid instrument, the Vicarious Surgical System's unique ability to operate in nearly every direction is designed to provide significantly more capability to the surgeon, while minimizing the injury and trauma to the patient. The camera and both instrument arms are being developed to enter the abdomen through a single, 1.8 centimeter trocar, which is anticipated to be reduced to a 1.5 centimeter trocar as development continues, that is within the size of conventional minimally invasive surgery trocars. Due to the smaller size of the Vicarious Surgical System, it will be able to provide significantly more sensing capability than existing systems, if the Vicarious Surgical System receives FDA authorization. The Vicarious Surgical System features 28 sensors per arm, to provide valuable feedback to the surgeon in real-time, and the sensors will also be capable of providing robust intraoperative data to continually enhance our AI capabilities and enhance surgeon capabilities over the long-term.

- ***Surgeon Console.*** The Vicarious Surgical System surgeon console is designed to provide all the systems necessary for the surgeon to have an effective, immersive experience, visualizing the surgical field and controlling all the motions of the robot. If authorized by the FDA, the surgeon console will enable performance and patient outcomes that are not available on other existing systems. The console includes a peer-in stereoscopic vision screen that gives surgeons the ability to operate in a 3D environment without the use of 3D glasses, while maintaining awareness and line of sight to the operating room.

- ***Patient Cart.*** The Vicarious Surgical System patient cart is designed to pass through the doorways of hospitals, outpatient clinics, ambulatory surgical centers, and any standard doorway, alleviating the equipment maneuverability concerns experienced by healthcare providers with competitor surgical robotics systems. Unlike existing robotic systems, the Vicarious Surgical System, if authorized by the FDA, would not require a dedicated operating room and could be wheeled into or out of any room, or stored in the hall, as the hospital does with other medical devices, significantly expanding accessibility to the system. Further, as most of the robotic motion occurs inside the abdomen in a single port, the Vicarious Surgical System does not have multiple, expensive, high-performance robotic arms outside the body, pivoting around the incision point to make small movements inside the body. We believe that these factors, together with the ability to utilize more advanced, sometimes less expensive manufacturing processes, will enable the Vicarious Surgical System to be significantly less expensive to build than competitive robotic systems, based on their publicly available data.

Vicarious Surgical System Advantages

We believe that to overcome the issues that have limited broad adoption of robot-assisted minimally invasive surgery procedures to date: cost, size, capability, ease of use, fast setup, high throughput, streamlined training, and improved patient outcomes, it is imperative to provide a solution that addresses all these concerns. The Vicarious Surgical System, with its advanced engineering and "de-coupled actuators," which enable a revolutionary approach to the development of surgical robotics, is designed to be uniquely able to significantly improve upon each of these factors. Because of its proprietary engineering advantage, the Vicarious Surgical System is designed to offer more degrees of freedom and dexterity with which the surgeon can more naturally operate, and to provide greater visibility, sensing and functionality to the surgeon, all through a small, single port that is designed to offer more capability and fewer challenges than any single or multi-port surgical modality available. Because the Vicarious Surgical System had not yet been authorized by the FDA or commercialized, the intended advantages of the Vicarious Surgical System have not yet been realized and are dependent upon the successful development of the Vicarious Surgical System and a timely authorization by the FDA.

- ***Decoupled Actuators.*** Robotic arms are controlled by actuators at each joint. Traditionally, these actuators are "coupled," meaning that movement of one joint causes movement at each subsequent or prior joint. This coupled motion can be corrected by legacy robots via complicated software to coordinate and eliminate the unwanted motion between these joints that would otherwise be created. However, the software cannot eliminate the exponential buildup of force across these joints caused by this coupled action. This exponential force buildup requires stronger cables and pulleys and other expensive and larger components, which adds significant size, cost, and limits the available mobility of legacy robotic systems. By fundamentally engineering a better solution, we have decoupled the motion between these actuators, reducing cost and integrating components and materials that enable enhanced visibility, flexibility and strength, which in turn are intended to provide significant benefits for surgeons, hospitals, ASCs and patients.

- ***Surgeon Experience***

  - ***Human Equivalent Motion — Nine Degrees of Freedom.*** The Vicarious Surgical System is the only robotic system, compared to all legacy single- or multi-port solutions, to offer the same nine full degrees of freedom that exist in the natural motion of the surgeon's own wrists, elbows and shoulders, providing unprecedented dexterity in a robot-assisted minimally invasive surgery. While other legacy robotic systems require the surgeon to conform and limit their movements to what the robot will enable, in cadaver studies, the Vicarious Surgical System offers the nearly full range of motion of the surgeon's own upper body, providing an experience that is more natural, and more akin to what they know best, open surgery, except miniaturized and transformed inside the body.

  - ***Expanded Reach Inside the Abdomen.*** With the full nine degrees of freedom provided by the Vicarious Surgical System, as shown in cadaver studies, the surgeon can enter the abdomen from nearly any angle and work in nearly any direction, with more freedom, all through a small single incision. Legacy robotic systems and manual minimally invasive surgery require the surgeon to triangulate to the surgical area and limit the surgeon to performing only in a small section directly in front of the incision. The Vicarious Surgical System's unprecedented reach is designed to enable the surgeon to pivot in nearly any direction during surgery and the surgeon can even pivot backwards and operate near the incision site.

  - ***Sensing, Visualization and AI.*** The surgeon can utilize the peer-in screen on the console for visualization. The Vicarious Surgical System's high-performance, stereoscopic camera can rotate in nearly every direction, similar to the natural motion of the surgeon's head, and is being developed to provide full 3D mapping. The Vicarious Surgical System contains more than two dozen sensors per arm, designed to provide unmatched sensing capability that is being developed to deliver valuable feedback on force, motion and other key data, to the surgeon in real-time. These sensors also will be used to feed our rapidly expanding need for data and AI development, which will be utilized to further enhance surgical procedures and provide a significant link and insight between pre- and peri-operative data and patient outcomes.

- ***Hospital and Ambulatory Surgical Center (ASC) Advantages***

  - ***System Size.*** Unlike legacy systems that require a construction build-out simply to fit their system into a dedicated operating room, the Vicarious Surgical System is designed to be small enough to fit through a single door. This is intended to enable faster set-up and break-down times, allowing the Vicarious Surgical System to be used anywhere within the facility.

  - ***Training.*** Because of the more natural motion of the Vicarious Surgical System, together with the fact that it is not confined to a dedicated operating suite like most legacy robotic systems, the Vicarious Surgical System can be more available for surgeons to practice, and it is expected that surgeons would be able to develop proficiency more quickly and easily than with legacy systems, which could improve surgeon adoption and enhance hospital and ASC return on investment.

  - ***Economics/System Cost.*** If authorized by the FDA, we intend to offer the Vicarious Surgical System, maintenance, and service support at more attractive pricing to existing legacy systems. With its increased capability and dexterity, it is expected that many procedures could be performed faster and more effectively, which could greatly reduce overall hospital costs.

  - ***Disposability.*** Our instruments and accessories have been designed and will be offered at a price that enables them to be used once and then disposed. Hospitals and ASCs will no longer need to dedicate space and expense to ensure these items are properly sterilized and available for re-use.

- ***Patient Outcomes***

  - ***Enhanced Capability.*** The Vicarious Surgical System will be designed to provide increased visualization and capability to the surgeon, and if the FDA authorizes the Vicarious Surgical System, it is intended to allow the surgeon to more easily perform advanced techniques that are proven in existing clinical use to provide for better patient outcomes.

  - ***Smaller Trocar — Fewer Complications.*** In open surgery, due to the large size of the incision, the incision fails to heal properly 15-20% of the time, a complication that may require additional surgery to fix. Multi-port manual and robot-assisted minimally invasive surgery, while significantly less capable than the Vicarious Surgical System is designed to be, utilize small trocars (*i.e.*, 8mm to 12mm), which greatly reduces this risk to approximately 1%. Existing single-port robots utilize at least a 25mm trocar size, which have a failure rate of nearly 10%, beginning to approach the failure rate of open surgery. The Vicarious Surgical System, like multi-port minimally invasive surgery, is designed to utilize a small trocar, which could enable superior results with the lowest overall risk. Currently, the Vicarious Surgical System utilizes an 18mm trocar, which is anticipated to be reduced to a 15mm trocar as development continues.

Our Strategy

With revolutionary advancements in design, we seek to democratize surgery through widespread access to a more capable and more affordable surgical robotic platform. Our objective is to become the leading provider of surgical robotic platforms for soft tissue surgery. To achieve this objective, we are pursuing the following business strategies, all of which are dependent upon the receipt of FDA authorization:

- **Drive adoption of the Vicarious Surgical System initially in the ventral hernia market.** We plan to initially focus our marketing efforts on surgeons and hospitals performing surgical procedures in general surgery, gynecology and other procedures that will benefit from our single incision platform. We believe our innovative system will deliver clinical and economic value that will address the unmet need in today's surgical operating rooms. Our strategy is to work with key thought leaders in general surgery, gynecology and other specialties who can help provide feedback that will help guide our product roadmap and surgical techniques.

- **Expand indications.** The ability to have universal access to the abdomen with the Vicarious Surgical System also presents opportunities for other procedures that we plan to target in the near future. Some of the future indications that are being targeted are inguinal and hiatal hernias, hysterectomy, cholecystectomy (gallbladder), colorectal and other gastrointestinal procedures. We estimate that 39 million of these procedures are performed annually worldwide today.

- **Generate recurring revenue.** After the initial installation of the Vicarious Surgical System, our goal is to increase the utilization of the Vicarious Surgical System by demonstrating the procedural and workflow efficiency of the System. Faster set up and procedure times with the Vicarious Surgical System can enable hospitals and ASCs to potentially schedule more procedures, which would in turn drive volume sales of single use components, including the robotic arms, camera and instrument tips.

- **Demonstrate clinical and financial value proposition.** Over 50% of ventral hernia procedures are performed as open surgical procedures in the hospital. We aim to capitalize on the trend of moving procedures from hospitals to ASCs. Additionally, we believe that the Vicarious Surgical System can accelerate the ability to perform complex hernia surgeries with a minimally invasive surgery procedure in an ASC as opposed to a hospital. However, ASCs typically do not have significant capital budgets to justify large capital purchases, nor do they have infrastructure budgets to undertake the construction of a dedicated operating suite. The Vicarious Surgical System's value proposition is designed to appeal to these ASCs.

- **Expand product offerings.** We believe that technologies such as virtual reality and AI have the potential to further enhance a surgeon's capabilities. We plan to develop advanced AI features, such as 3D depth mapping, and automated suturing, to be incorporated into future generations of the Vicarious Surgical System.

- **Commercialization outside U.S.** If the FDA authorizes the Vicarious Surgical System for commercialization in the U.S., we intend to seek applicable regulatory clearances or approvals in Asia, Europe and the rest of the world to commercialize the Vicarious Surgical System worldwide.

Historical Development of the Vicarious Surgical System and Regulatory Pathway

The technology for our robot was developed by Legacy Vicarious founders Adam Sachs, Sammy Khalifa, and Barry Greene between 2009 and 2015. After considerable prototyping and experimentation, the team discovered and patented a cable pathway through the robotic arm to fully de-couple the motion of the robotic device. This series of innovations enabled the first successful prototype of a complete robotic arm that resembles the motion of the surgeon's body. The founding team went on to take this design and create a full prototype of the device, machining the parts themselves and funding the project out of pocket. After the first fully functioning robotic arm was created, integrated with software designed by the Legacy Vicarious founders, as well as a surgeon input tracking system, the founding team was able to raise outside capital and successfully grow the team in order to continue to drive development and growth.

We have conducted, and continue to conduct, several cadaver studies with the prototype Vicarious Surgical System. The goal of each study was to refine the performance of the Vicarious Surgical System. In these cadaver studies, the Vicarious Surgical System prototype was used to perform several ventral hernia repair procedures, hysterectomy procedures and cholecystectomy procedures. In addition, in these cadaver studies, surgeons have used the Vicarious Surgical System prototype to perform various techniques for ventral hernia repair, including robotic transabdominal preperitoneal, or rTAPP, retrorectus, and intraperitoneal onlay mesh repair (IPOM) plus. These studies were used to gather insights regarding:

- The length of the robotic instruments needed to perform ventral hernia repair procedures;
- Field and depth of view of the robotic camera;
- User interface elements, such as the clutch pedal, navigation pedals and digital interface elements;
- Quality of robotic end-effector motion in response to surgeon hand motion;
- Insertion and extraction workflow; and
- Reliability of the robotic instruments and camera.

In November 2019, we received FDA Breakthrough Device designation for a prior version of the Vicarious Surgical System with a proposed indication for use in ventral hernia repair procedures. The Vicarious Surgical System is considered a Class II medical device. We have had pre-submission meetings with the FDA to align on our regulatory strategy and plan to file a de novo application with the FDA for use in ventral hernia procedures as our first indication.

A preliminary meeting with the FDA was conducted in December 2021 to discuss with the FDA our decision to make two technology changes to the Vicarious Surgical System design that was granted Breakthrough Device designation in November 2019. Based on these changes, the FDA has determined that the current Vicarious Surgical System design that is planned for the initial limited launch and was submitted to the FDA in the November 2021 FDA pre-submission meeting request is different from the device that was granted Breakthrough Device designation for the device design filed in November 2019. The FDA stated that the Breakthrough Device designation remains active for the prior device design granted Breakthrough Device designation in November 2019. In the future, we may attempt to reincorporate the technologies from such prior device design to leverage the previously granted Breakthrough Device designation. The process of medical device development is inherently uncertain and there is no guarantee that a Breakthrough Device designation will be granted to a different device design, and if it were granted, there is no guarantee that such designation will accelerate the timeline for authorization or make it more likely that the Vicarious Surgical System will be authorized.

In February 2022, a pre-submission meeting was held with the FDA to gain alignment on the current Vicarious Surgical System. Feedback provided by the FDA indicated that each robotic-assisted surgical system has distinctive kinetics, connections, data transmission and interfaces, including interfaces for the user, patient and environment, the combination of which composes a unique and multifaceted system. Additionally, the FDA indicated that each robotic-assisted surgical system has unique inputs and outputs and must account for uncertainty and instability in different ways. Taken together, these different technological characteristics raise different questions of safety or effectiveness that are not applicable to a predicate device and may pose a significant safety or effectiveness concern for the Vicarious Surgical System. For example, the way that a robotic-assisted surgical system is constructed and implemented will have a direct bearing on the safety and effectiveness profile of the device and different robotic-assisted surgical systems are not sufficiently similar to allow for meaningful comparison between the Vicarious Surgical System and predicate robotic-assisted surgical systems. The FDA indicated that the evaluation of the complex Vicarious Surgical System requires a holistic approach of the performance testing, such as software, bench, animal, human factors and usability, and clinical data to determine how each element establishes the Vicarious Surgical System's integration approach to the intended use and more specifically the indicated procedures. Therefore, each robotic-assisted surgical system carries new or different risks and an evaluation of these risks will require an independent evaluation of the safety and effectiveness of the Vicarious Surgical System due to the technology and the implementation into the clinical care. Based on this feedback, the FDA has determined that a 510(k) submission would likely be found not substantially equivalent to a predicate robotic-assisted surgical system. In accordance with this FDA feedback, we have revised our regulatory roadmap for market authorization, as discussed below.

Regulatory Roadmap for Market Authorization

Based on the outcome of the pre-submission meeting with the FDA in February 2022, the FDA has determined that there is no legally marketed predicate device. Therefore, we will plan to file a de novo classification request for the proposed initial indication for use in ventral hernia repair procedures as a regulatory pathway to classify the Vicarious Surgical System. Devices that are classified into Class I or Class II through a de novo classification request may be marketed and used as predicates for future premarket notification 510(k) submissions, when applicable. Accordingly, we believe that 510(k) filings will be available as a regulatory pathway for the Vicarious Surgical System with respect to future indications.

We plan to conduct a prospective human pivotal clinical investigation under an FDA Investigational Device Exemption (IDE) to evaluate the safety, effectiveness, and performance of the Vicarious Surgical System to obtain U.S. market authorization for the proposed indication for use in ventral hernia repair procedures. In addition to conducting a human pivotal clinical investigation, we plan to conduct non-clinical testing activities to verify and validate the safety, performance, effectiveness, functionality, usability and reliability characteristics of the Vicarious Surgical System with respect to the intended use and defined requirements. A verification and validation process is expected to provide the necessary data to submit to the FDA for IDE approval.

We expect that non-clinical verification and validation testing will be conducted to verify and validate that the Vicarious Surgical System meets all design specifications for its intended use. These tests will include in-vitro, simulated clinical bench testing and cadaver studies, as well as animal studies to support and demonstrate the safety, performance, effectiveness, functionality, usability, and reliability characteristics of the Vicarious Surgical System with respect to the intended use and defined requirements. Cadaver studies, representing realistic dimensions and contours of the human abdominal space, will be used primarily to verify and validate system functionality, performance, and safety relevant to patient anatomy and contexts of use with respect to insertion, access and movement within the abdominal cavity, visualization, manipulating tissue, cutting, and suturing as needed during a simulated ventral hernia repair procedure. Animal studies will be used primarily to demonstrate performance, safety, efficacy, and usability of the system as relevant to a live model with respect to insertion, access and movement within the abdominal cavity, visualization, manipulating tissue, cutting, coagulating, and suturing, during a simulated ventral hernia repair procedure. This testing may also be used to demonstrate that applicable risk mitigation features, including software alarms, alerts, extraction of multi-jointed instrumentation in case of system failure, misuse, or other errors are adequate and perform to specifications. Summative usability testing will be conducted by surgeons, nurses and technicians in a simulated operating room environment to provide objective evidence that the Vicarious Surgical System can be used safely and effectively by end users for its intended uses, the device functions as expected and intended, and all risk mitigations implemented are safe and effective. In addition, we plan to conduct simulated bench-top testing on transparent anatomical models to evaluate, among other things, how the Vicarious Surgical System performs in “worst case” scenarios to verify and validate safe anatomical access, instrument/camera angulation and movement at the extremes of various surgical procedures with respect to patient anatomy and dimensions that cannot be readily controlled for when using live animal and human cadaver models.

Future Indications

We plan to expand upon our claims and/or indication for use to address additional unmet clinical needs in different anatomical areas as well as therapeutic procedures. Following the initial authorization for use in ventral hernia repair procedures under a de novo classification, if obtained by the FDA, we plan to submit 510(k) filings for other indications for use, using the Vicarious Surgical System’s first de novo authorization as a predicate, along with other predicate devices with similar cleared indications for use. We have identified several potential future indications and procedures that align well with the Vicarious Surgical System’s ability to access and visualize the abdominal cavity. Possible future indications may include but not be limited to inguinal and hiatal hernias, hysterectomy, cholecystectomy (gallbladder), colorectal and other gastrointestinal procedures. We will perform an assessment to determine the appropriate regulatory strategy required to expand claims and obtain applicable regulatory clearances in the United States and in other global markets.

Intellectual Property

We strive to protect and enhance the proprietary technology, inventions and improvements that are important to our business by seeking, maintaining and defending our intellectual property, all of which has been developed internally and not in-licensed from third parties. We also rely on trade secrets, know-how, continuing technological innovation and in-licensing opportunities to develop, strengthen and maintain our proprietary position in the field of surgical robotics. Additionally, we intend to rely on regulatory protection afforded through data exclusivity and market exclusivity as well as patent term extensions, where available.

We currently do not rely heavily on technologies from third parties. However, in the future, we may need to rely or be dependent on patented or proprietary technologies that we may license from third parties.

We maintain a patent portfolio that includes issued U.S. and foreign patents as well as pending U.S. and foreign patent applications, which include claims directed towards our proprietary technology. We intend to pursue additional intellectual property protection to the extent we believe it would be beneficial and cost-effective. As of January 31, 2023, we owned approximately seven (7) issued U.S. utility patents, approximately two (2) issued utility patents in foreign jurisdictions including one (1) in China and one (1) in Japan, approximately 114 pending utility patent applications in the U.S. and foreign jurisdictions, including in Canada, China, Europe, Japan, Hong Kong and India, and approximately one (1) U.S. design patent application. An additional two (2) U.S. patents and one (1) European patent are expected to issue early 2023. These issued utility patents and pending utility patent applications (if they were to issue as patents) have expected expiration dates ranging between 2035 and 2041. Our patents and patent applications are directed to, among other things, our core technology. This includes the surgical robotic and camera system; sensing capabilities, controls and visualization interfaces; the surgical tools suite; and related technologies.

The term of individual patents may vary based on the countries in which they are obtained. Generally, patents issued for applications filed in the United States are effective for 20 years from the earliest effective non-provisional filing date. In addition, in certain instances, a patent term can be extended to recapture a portion of the term effectively lost as a result of the FDA regulatory review period. The restoration period cannot be longer than five years and the total patent term, including the restoration period, must not exceed 14 years following FDA approval. The duration of patents outside of the United States varies in accordance with provisions of applicable local law, but typically is also 20 years from the earliest effective filing date.

In addition to patents and patent applications, we rely on trade secrets and know-how to develop and maintain our competitive position. However, trade secrets can be difficult to protect. We seek to protect our proprietary technology and processes, and obtain and maintain ownership of certain technologies, in part, through confidentiality agreements and invention assignment agreements with our employees, consultants, scientific advisors, contractors and commercial partners. We also seek to preserve the integrity and confidentiality of our data, trade secrets and know-how, including by implementing measures intended to maintain the physical security of our premises and the physical and electronic security of our information technology systems.

Our future commercial success depends, in part, on our ability to obtain and maintain patent and other proprietary protection for commercially important technology, inventions and know-how related to our business; defend and enforce our patents; preserve the confidentiality of our trade secrets; and operate without infringing the valid enforceable patents and proprietary rights of third parties. Our ability to stop third parties from making, using, selling, offering to sell or importing our product candidates will depend on the extent to which we have rights under valid and enforceable patents or trade secrets that cover these activities. Moreover, we may be unable to obtain patent protection for the Vicarious Surgical System generally, as well as with respect to certain surgical indications. See the section entitled "*Risk Factors — Risks Related to Our Intellectual Property*" for a more comprehensive description of risks related to our intellectual property.

Research and Development

As of February 6, 2023, our research and development programs are generally pursued by our 119 engineering, scientific and technical personnel employed by us in our offices in Massachusetts on a full-time basis or as consultants, or through partnerships with industry leaders in manufacturing and design and with researchers in academia. We are also working with subcontractors in developing specific components of our technologies.

The primary objectives of our research and development efforts are to continue to introduce incremental enhancements to the capabilities of the Vicarious Surgical System and to advance development.

For the fiscal years ended December 31, 2022 and 2021, we incurred research and development expenses of $43.9 million and $22.1 million, respectively.

Manufacturing

We have expanded our manufacturing capabilities with the development of a manufacturing facility, including a clean room, within our headquarters in Waltham, Massachusetts, and have hired key manufacturing personnel. We currently rely, and expect to continue to rely, on third parties for the manufacturing of certain products for preclinical and clinical testing, as well as for commercial manufacturing.

We purchase both custom and off-the-shelf components from a large number of suppliers and subject them to stringent quality specifications and processes. Some of the components necessary for the assembly of the Vicarious Surgical System are currently provided to us by sole-sourced suppliers or single-sourced suppliers.

We are committed to developing an ethical, safe and sustainable supply chain. This extends to our supplier base as well, so we are seeking partnerships with suppliers who share our commitment to strong ethics and full compliance with all applicable laws.

We promote the following basic principles in our supply chain:

- Business practices that respect human rights that align with international standards of responsible business conduct;
- Compliance with conflict mineral laws;
- Business integrity;
- Environmental responsibility and sustainability;
- Protection of confidential information.

Competition

We face competition in the forms of existing open surgery, conventional minimally invasive surgery, drug therapies, radiation treatment, and emerging interventional surgical approaches. Our success depends on continued clinical and technical innovation, quality and reliability, as well as educating hospitals, surgeons, and patients on the results associated with robotic-assisted surgery using the Vicarious Surgical System and our value proposition relative to other techniques. We also face competition from several companies that have introduced or are developing new approaches and products for the minimally invasive surgery market. We believe that the entrance or emergence of competition validates robotic-assisted surgery.

We face competition from larger and well-established companies. The companies that have introduced products in the field of robotic-assisted surgery or have made explicit statements about their efforts to enter the field, include, but are not limited to: Intuitive Surgical, Inc.; Johnson & Johnson (including their wholly-owned subsidiaries Ethicon Endo-Surgery, Inc., Auris Health, Inc. and Verb Surgical Inc.); Medtronic plc (including their wholly-owned subsidiary Covidien LP); Virtual Incision Corporation; Titan Medical Inc.; Stryker Corporation; and CMR Surgical Ltd. Other companies with substantial experience in industrial robotics could potentially expand into the field of surgical robotics and become a competitor. In addition, research efforts utilizing computers and robotics in surgery are underway at various companies and research institutions. Our ability to generate future revenue may be adversely impacted as competitors announce their intent to enter these markets and as our potential customers anticipate the availability of competing products.

Commercialization

We have not yet established a sales or product distribution infrastructure for the Vicarious Surgical System. We plan to access the U.S. market with the Vicarious Surgical System through strategic partnerships and also develop our own focused, specialized sales force or distribution channels once we have commercialized the Vicarious Surgical System.

Government Regulation

Our operations are subject to comprehensive federal, state, and local laws and regulations in the jurisdictions in which we or our research and development partners or affiliates do business. The laws and regulations governing our business and interpretations of those laws and regulations are subject to frequent change. Our ability to operate profitably will depend in part upon our ability, and that of our research and development partners and affiliates, to operate in compliance with applicable laws and regulations. The laws and regulations relating to medical products and healthcare services that apply to our business and that of our partners and affiliates continue to evolve, and we must, therefore, devote significant resources to monitoring developments in legislation, enforcement, and regulation in such areas. As the applicable laws and regulations change, we are likely to make conforming modifications in our business processes from time to time. We cannot provide assurance that a review of our business by courts or regulatory authorities will not result in determinations that could adversely affect our operations or that the regulatory environment will not change in a way that restricts our operations.

FDA Regulation

Medical devices are strictly regulated by the FDA, in the United States. Under the Federal Food, Drug, and Cosmetic Act (FDCA), a medical device is defined as "an instrument, apparatus, implement, machine, contrivance, implant, in vitro reagent, or other similar or related article, including a component, part or accessory which is, among other things: intended for use in the diagnosis of disease or other conditions, or in the cure, mitigation, treatment, or prevention of disease, in man or other animals; or intended to affect the structure or any function of the body of man or other animals, and which does not achieve its primary intended purposes through chemical action within or on the body of man or other animals and which is not dependent upon being metabolized for the achievement of any of its primary intended purposes." This definition provides a clear distinction between a medical device and other FDA regulated products such as drugs. If the primary intended use of a medical product is achieved through chemical action or by being metabolized by the body, the product is usually a drug or biologic. If not, it is generally a medical device.

We are currently developing a robotic-assisted surgical system, which is regulated by the FDA as a medical device under the FDCA, as implemented and enforced by the FDA. The FDA regulates the development, testing, manufacturing, labeling, packaging, storage, installation, servicing, advertising, promotion, marketing, distribution, import, export, and post-market surveillance of medical devices.

Device Premarket Regulatory Requirements

Before being introduced into the U.S. market, each medical device must obtain marketing clearance, authorization, or approval from the FDA through the premarket notification (510(k)) process, the de novo classification process, or the premarket approval (PMA) process, unless they are determined to be Class I devices or to otherwise qualify for an exemption from one of these available forms of premarket review and clearance, authorization, or approval by the FDA. Under the FDCA, medical devices are classified into one of three classes — Class I, Class II or Class III — depending on the degree of risk associated with each medical device and the extent of control needed to provide reasonable assurance of safety and effectiveness. Classification of a device is important because the class to which a device is assigned determines, among other things, the necessity and type of FDA review required prior to marketing the device. Class I devices are those for which reasonable assurance of safety and effectiveness can be maintained through adherence to general controls that include compliance with the applicable portions of the FDA's Quality System Regulation, (or the QSR), as well as regulations requiring establishment registration and device listing, reporting of adverse medical events, and appropriate, truthful and non-misleading labeling and promotional materials. The Class I designation also applies to devices for which there is insufficient information to determine that general controls are sufficient to provide reasonable assurance of the safety and effectiveness of the device or to establish special controls to provide such assurance, but that are not life-supporting or life-sustaining or for a use which is of substantial importance in preventing impairment of human health, and that do not present a potential, unreasonable risk of illness or injury.

Class II devices are those for which general controls alone are insufficient to provide reasonable assurance of safety and effectiveness and there is sufficient information to establish "special controls." These special controls can include performance standards, post-market surveillance requirements, patient registries and FDA guidance documents describing device-specific special controls. While most Class I devices are exempt from the 510(k) premarket notification requirement, most Class II devices require a clearance of a 510(k) premarket notification prior to commercialization in the United States; however, the FDA has the authority to exempt Class II devices from the premarket notification requirement under certain circumstances. As a result, manufacturers of most Class II devices must submit 510(k) premarket notifications to the FDA in order to obtain the necessary clearance to market or commercially distribute such devices. To obtain 510(k) clearance, manufacturers must submit to the FDA adequate information demonstrating that the proposed device is "substantially equivalent" to a "predicate device" that is already on the market. A predicate device is a legally marketed device that is not subject to PMA, meaning, (i) a device that was legally marketed prior to May 28, 1976 ("preamendments device") and for which a PMA is not required, (ii) a device that has been reclassified from Class III to Class II or I, or (iii) a device that was found substantially equivalent through the 510(k) process. If the FDA agrees that the device is substantially equivalent to the predicate device identified by the applicant in a premarket notification submission, the FDA will grant 510(k) clearance for the new device, permitting the applicant to commercialize the device. Premarket notifications are subject to user fees, unless a specific exemption applies.

If there is no adequate predicate to which a manufacturer can compare its proposed device, the proposed device is automatically classified as a Class III device. In such cases, a device manufacturer must then fulfill the more rigorous PMA requirements or can request a risk-based classification determination for its device in accordance with the de novo classification process.

Devices that are intended to be life sustaining or life supporting, devices that are implantable, devices that present a potential unreasonable risk of harm or are of substantial importance in preventing impairment of health, and devices that are not substantially equivalent to a predicate device and for which safety and effectiveness cannot be assured solely by the general controls and special controls are placed in Class III. Such devices generally require FDA approval through the PMA process, unless the device is a preamendments device not yet subject to a regulation requiring premarket approval. The PMA process is more demanding than the 510(k) process. For a PMA, the manufacturer must demonstrate through extensive data, including data from preclinical studies and one or more clinical trials, that the device is safe and effective for its proposed indication. The PMA must also contain a full description of the device and its components, a full description of the methods, facilities and controls used for manufacturing, and proposed labeling. Following receipt of a PMA submission, the FDA determines whether the application is sufficiently complete to permit a substantive review. If the FDA accepts the application for review, it has 180 days under the FDCA to complete its review and determine whether the proposed device can be approved for commercialization, although in practice, PMA reviews often take significantly longer, and it can take up to several years for the FDA to issue a final decision. Before approving a PMA, the FDA generally also performs an on-site inspection of manufacturing facilities for the product to ensure compliance with the QSR.

The de novo classification process allows a manufacturer whose novel device is automatically classified into Class III to request down-classification of its device to Class I or Class II, on the basis that the device presents low or moderate risk, as an alternative to following the typical Class III device pathway requiring the submission and approval of a PMA application. Under the Food and Drug Administration Safety and Innovation Act of 2012, the FDA is required to classify a device within 120 days following receipt of the de novo classification request from an applicant; however, the most recent FDA premarket review goals state that in fiscal year 2023, FDA will attempt to issue a decision within 150 days of receipt on 70% of all de novo classification requests received during the year. If the manufacturer seeks reclassification into Class II, the classification request must include a draft proposal for special controls that are necessary to provide a reasonable assurance of the safety and effectiveness of the medical device. The FDA may reject the classification request if it identifies a legally marketed predicate device that would be appropriate for a 510(k) notification or determines that the device is not low to moderate risk or that general controls would be inadequate to control the risks and special controls cannot be developed. De novo classification requests are subject to user fees, unless a specific exemption applies.

Clinical trials are almost always required to support PMAs and are sometimes required to support 510(k) and de novo classification submissions. All clinical investigations of devices to determine safety and effectiveness must be conducted in accordance with the FDA's investigational device exemption, (or IDE), regulations that govern investigational device labeling, prohibit promotion of investigational devices, and specify recordkeeping, reporting and monitoring responsibilities of study sponsors and study investigators. If the device presents a "significant risk," as defined by the FDA, the FDA requires the device sponsor to submit an IDE application to the FDA, which must become effective prior to commencing human clinical trials. The IDE will automatically become effective 30 days after receipt by the FDA, unless the FDA denies the application or notifies us that the investigation is on hold and may not begin until the sponsor provides supplemental information about the investigation that satisfies the FDA's concerns. If the FDA determines that there are deficiencies or other concerns with an IDE that require modification of the study, the FDA may permit a clinical trial to proceed under a conditional approval. In addition, the study must be approved by, and conducted under the oversight of, an institutional review board, (or IRB), for each clinical site. If the device presents a non-significant risk to the patient according to criteria established by the FDA as part of the IDE regulations, a sponsor may begin the clinical trial after obtaining approval for the trial by one or more IRBs without separate authorization from the FDA, but must still comply with abbreviated IDE requirements, such as monitoring the investigation, ensuring that the investigators obtain informed consent, and labeling and record-keeping requirements.

Post-Marketing Restrictions and Enforcement

After a device is placed on the market, numerous regulatory requirements apply. These include, but are not limited to:

- submitting and updating establishment registration and device listings with the FDA;
- compliance with the QSR, which requires manufacturers to follow stringent design, testing, control, documentation, record maintenance, including maintenance of complaint and related investigation files, and other quality assurance controls during the manufacturing process;
- unannounced routine or for-cause device facility inspections by the FDA, which may include our suppliers' facilities; and
- labeling regulations, which prohibit the promotion of products for uncleared or unapproved (or "off-label") uses and impose other restrictions relating to promotional activities;
- corrections and removal reporting regulations, which require that manufacturers report to the FDA field corrections or removals if undertaken to reduce a risk to health posed by a device or to remedy a violation of the FDCA that may present a risk to health; and
- post-market surveillance regulations, which apply to certain Class II or III devices when necessary to protect the public health or to provide additional safety and effectiveness data for the device.

In addition, under the FDA medical device reporting, (or MDR), regulations, medical device manufacturers are required to report to the FDA information that a device has or may have caused or contributed to a death or serious injury or has malfunctioned in a way that would likely cause or contribute to death or serious injury if the malfunction of the device or a similar device of such manufacturer were to recur. The decision to file an MDR involves a judgment by the manufacturer. If the FDA disagrees with the manufacturer's determination, the FDA can take enforcement action.

The medical device reporting requirements also extend to health care facilities that use medical devices in providing care to patients, or "device user facilities," which include hospitals, ambulatory surgical facilities, nursing homes, outpatient diagnostic facilities, or outpatient treatment facilities, but not physician offices. A device user facility must report any device-related death to both the FDA and the device manufacturer, or any device-related serious injury to the manufacturer (or, if the manufacturer is unknown, to the FDA) within 10 days of the event. Device user facilities are not required to report device malfunctions that would likely cause or contribute to death or serious injury if the malfunction were to recur but may voluntarily report such malfunctions through MedWatch, the FDA's Safety Information and Adverse Event Reporting Program.

The FDA also has the authority to require the recall of commercialized medical device products in the event of material deficiencies or defects in design or manufacture. The authority to require a recall must be based on an FDA finding that there is a reasonable probability that the device would cause serious adverse health consequences or death. Manufacturers may, under their own initiative, recall a product if any distributed devices fail to meet established specifications, are otherwise misbranded or adulterated under the FDCA, or if any other material deficiency is found. The FDA requires that certain classifications of recalls be reported to the FDA within ten working days after the recall is initiated.

The failure to comply with applicable regulatory requirements can result in enforcement action by the FDA, which may include any of the following sanctions:

- warning letters, fines, injunctions or civil penalties;
- recalls, detentions or seizures of products;
- operating restrictions;
- delays in the introduction of products into the market;
- total or partial suspension of production;
- delay or refusal of the FDA or other regulators to grant 510(k) clearance, de novo authorization, PMA approvals, or other marketing authorization to new products;
- withdrawals of marketing authorizations, clearances, or approvals; or
- in the most serious cases, criminal prosecution.

To ensure compliance with regulatory requirements, medical device manufacturers are subject to market surveillance and periodic, pre-scheduled and unannounced inspections by the FDA, and these inspections may include the manufacturing facilities of subcontractors.

Breakthrough Device Designation

The 21st Century Cures Act, which was signed into law on December 13, 2016, established and directed FDA to implement the Breakthrough Devices Program. Under the program, device manufacturers may voluntarily request breakthrough designation for devices that provide for more effective treatment or diagnosis of life-threatening or irreversibly debilitating human disease or conditions over currently available technology and that meet at least one of the following criteria:

- The device represents breakthrough technology;
- There are no approved or cleared alternatives for the device;
- The device offers significant advantages over existing approved or cleared alternatives; or
- Availability of the device is in the best interest of patients.

The goal of the Breakthrough Devices Program is to accelerate the timeline to market for novel devices that will likely provide a benefit to patients. A Breakthrough Device designation offers multiple benefits to the device manufacturer, including priority review of the pre-market submission for the device, opportunities to interact directly with FDA's experts throughout the process, and engagement of FDA senior management, to the extent permitted by the FDA's resources.

In November 2019, we received FDA Breakthrough Device designation for a prior version of the Vicarious Surgical System with a proposed indication for use in ventral hernia repair procedures. The Vicarious Surgical System is considered a Class II medical device. We have had pre-submission meetings with the FDA to align on our regulatory strategy and plan to file a de novo application with the FDA for use in ventral hernia procedures as our first indication.

A preliminary meeting with the FDA was conducted in December 2021 to discuss with the FDA our decision to make two technology changes to the Vicarious Surgical System design that was granted Breakthrough Device designation in November 2019. Based on these changes, the FDA has determined that the current Vicarious Surgical System design that is planned for the initial limited launch and was submitted to the FDA in the November 2021 FDA pre-submission meeting request is different from the device that was granted Breakthrough Device designation for the device design filed in November 2019. The FDA stated that the Breakthrough Device designation remains active for the prior device design granted Breakthrough Device designation in November 2019. In the future, we may attempt to reincorporate the technologies from such prior device design to leverage the previously granted Breakthrough Device designation. The process of medical device development is inherently uncertain and there is no guarantee that a Breakthrough Device designation will be granted to a different device design, and if it were granted, there is no guarantee that such designation will accelerate the timeline for authorization or make it more likely that the Vicarious Surgical System will be authorized.

Federal Trade Commission Regulatory Oversight

Our advertising for our products and services is subject to federal truth-in-advertising laws enforced by the Federal Trade Commission, or the FTC, as well as comparable state consumer protection laws. Under the Federal Trade Commission Act, or the 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 civil penalties, injunctions affecting the manner in which we would be able to market services or products in the future, or criminal prosecution.

Healthcare Law and Regulation

If the Vicarious Surgical System or our other product candidates are authorized in the United States, we will have to comply with various U.S. federal and state laws, rules and regulations pertaining to healthcare fraud and abuse, including anti-kickback laws and physician self-referral laws, rules and regulations. Violations of the fraud and abuse laws are punishable by criminal and civil sanctions, including, in some instances, exclusion from participation in federal and state healthcare programs, including Medicare and Medicaid. These laws include the following:

- the federal Anti-Kickback Statute prohibits, among other things, persons from knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in cash or in kind, to induce or reward either the referral of an individual for, or the purchase, order or recommendation of, any good or service, for which payment may be made, in whole or in part, under a federal healthcare program such as Medicare and Medicaid;

- the federal False Claims Act imposes civil penalties, and provides for civil whistleblower or qui tam actions, against individuals or entities for knowingly presenting, or causing to be presented, to the federal government, claims for payment that are false or fraudulent or making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government;

- the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, imposes criminal and civil liability for executing a scheme to defraud any healthcare benefit program or making false statements relating to healthcare matters;

- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act and its implementing regulations, also imposes obligations, including mandatory contractual terms, with respect to safeguarding the privacy, security and transmission of individually identifiable health information;

- the federal false statements statute prohibits knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false statement in connection with the delivery of or payment for healthcare benefits, items or services;

- the federal transparency requirements under the Physician Payments Sunshine Act require manufacturers of FDA-cleared, authorized, or approved drugs, devices, biologics and medical supplies covered by Medicare or Medicaid to report, on an annual basis, to the Department of Health and Human Services information related to payments and other transfers of value to physicians, teaching hospitals, and certain advanced non-physician health care practitioners and physician ownership and investment interests; and

- analogous state and foreign laws and regulations, such as state anti-kickback and false claims laws, may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by nongovernmental third-party payors, including private insurers.

Some state laws require pharmaceutical or medical device companies to comply with the relevant industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government in addition to requiring drug and device manufacturers to report information related to payments to physicians and other health care providers or marketing expenditures.

State and foreign laws also govern the privacy and security of health information in some circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts. We also may be subject to, or may in the future become subject to, U.S. federal and state, and foreign laws and regulations imposing obligations on how we collect, use, disclose, store and process personal information. Our actual or perceived failure to comply with such obligations could result in liability or reputational harm and could harm our business. Ensuring compliance with such laws could also impair our efforts to maintain and expand our customer base and thereby decrease our future revenues.

We recognize the risk of cybersecurity incidents and work to constantly evolve our incident response plans as the known threat vectors emerge. We vet and verify the cybersecurity practices and compliance of our vendors to ensure they follow established guidelines, compliance requirements, and best practices related to their industry. Internally, we utilize a cybersecurity maturity model based on federal standards to track and report on the current and future compliance and progress within the multiple areas of compliance and concern. We intend to make steady measured improvements to our cybersecurity maturity along with investments in tools, and services that are aligned with our growth and maturity. We intend to adhere to a baseline of best practices that include proper use of encryption of data and communications, policies and procedures, and mitigation/validation practices that seek to ensure the approach is meeting or exceeding our commitment to our plan.

Third-Party Coverage and Reimbursement

In the United States, third-party payors, including government health programs such as Medicare and Medicaid, commercial health insurers and managed care organizations, are responsible for hospital and surgeon reimbursement for covered surgical procedures. Third-party payors generally reimburse hospitals and physicians for surgery when the procedure is considered medically necessary. The Centers for Medicare and Medicaid Services, or CMS, manages the Medicare program and administers the Medicaid program in conjunction with applicable state governments. Many commercial health insurers model their reimbursement methodologies after the Medicare program. As the single largest payor, the Medicare program has a significant impact on other third-party payors' payment systems.

Generally, reimbursement for professional services performed at a facility by physicians is reported under billing codes issued by the American Medical Association, or AMA, known as Current Procedural Terminology, or CPT, codes. Physician reimbursement under Medicare generally is based on a fee schedule and determined by the relative value of the professional service rendered. In addition, CMS and the National Center for Health Statistics are jointly responsible for overseeing changes and modifications to billing codes used by hospitals to report inpatient procedures, known as ICD-10-PCS codes. Under the Medicare program, CMS generally reimburses hospitals for services provided during an inpatient stay based on a prospective payment system that is determined by a classification system known as Medicare-Severity Diagnostic Related Groupings, or MS-DRGs. MS-DRGs are assigned using a number of factors, including the principal diagnosis, major procedures, discharged status, patient age, and complicating secondary diagnoses, among other things. Hospital outpatient services, reported by CPT codes, are assigned to clinically relevant Ambulatory Payment Classifications used to determine the payment amount for services provided.

Since October 1, 2015, a new family of ICD-10-PCS codes can be used, in conjunction with other applicable procedure codes, to describe various robotic-assisted procedures. An inpatient surgical procedure, completed with or without robotic assistance, continues to be assigned to the clinically relevant MS-DRG.

Third-party payors carefully review and increasingly challenge the prices charged for medical products and surgical services. Reimbursement rates from commercial health insurers vary depending on the procedure performed, the specific payor's reimbursement policies, contract terms, and other factors. Because both hospitals and physicians may receive the same reimbursement for a surgical procedure, whether it is performed with robotic assistance or not and regardless of actual costs incurred in furnishing the patient care, including for the specific medical products or supplies used during that procedure, hospitals and physicians may decide not to use our products if reimbursement amounts are insufficient to cover any additional costs incurred when purchasing and using our products.

For procedures that would involve assistance from our robotic-assisted surgical system, U.S. health care institutions typically bill various third-party payors, such as government health programs (e.g., Medicare and Medicaid) and commercial health insurance plans, for the primary surgical procedure only. If our robotic-assisted surgical system receives marketing authorization from the FDA, coverage and reimbursement by third-party payors will generally be determined by the medical necessity of the primary surgical procedure. Government health programs and other third-party payors may also consider additional factors when determining coverage and reimbursement, including the designation of the surgical procedure as a covered benefit, the appropriateness of the procedure for the specific patient, guidelines for the procedure established by the relevant professional college or medical society, and a payor determination that the procedure is neither experimental nor investigational. We believe that the procedures we intend to pursue as indications for use for our robotic-assisted surgical system are established surgical procedures that are generally already reimbursable by government health programs, commercial health insurers, and managed care organizations for appropriately selected patients. If hospitals do not obtain sufficient reimbursement from third-party payors for procedures performed with our products, or if government and commercial payors' policies do not cover surgical procedures performed using our products, we may not be able to generate the revenues necessary to support our business.

In the United States, there have been, and continue to be, a number of legislative initiatives to contain healthcare costs. In March 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act (collectively, the "ACA"), was enacted. The ACA made changes that have significantly impacted healthcare providers, insurers, and manufacturers of pharmaceuticals and medical devices. For example, the ACA included a number of provisions designed to generate the revenues necessary to fund health insurance coverage expansion, including, but not limited to, fees or taxes on certain health-related industries, including medical device manufacturers.

There remain judicial and Congressional challenges to certain aspects of the ACA, and as a result certain of its sections have not been fully implemented or effectively repealed. In particular, in December of 2018, a Texas U.S. District Court Judge ruled that the ACA is unconstitutional in its entirety because the individual mandate was repealed by Congress as part of the Tax Cuts and Jobs Act, effective January 1, 2019. In December 2019, the Fifth Circuit Court of Appeals upheld the district court's ruling that the individual mandate in the ACA was unconstitutional but remanded the case to the district court to determine whether other reforms enacted as part of the ACA but not specifically related to the individual mandate or health insurance could be severed from the rest of the ACA so as not to have the law declared invalid in its entirety. On March 2, 2020, the U.S. Supreme Court granted the petitions for writs of certiorari to review this case and allocated one hour for oral arguments, which occurred on November 10, 2020. On February 10, 2021, the Department of Justice sent a letter to the U.S. Supreme Court that stated the new administration believes the individual mandate and its tax penalty are constitutional, and if the Court determines that they are not, the provision can be severed from the remainder of the act. With this letter, the Biden administration reversed the Trump administration position that was presented to the Court. The Trump administration had claimed that the tax provision is unconstitutional and could not be separated from the ACA, making the entire ACA unconstitutional as a result. The U.S. Supreme Court held in a 7–2 opinion that the states and individuals that brought the lawsuit challenging the ACA's individual mandate do not have standing to challenge the law. The U.S. Supreme Court did not reach the merits of the challenge, but the decision ends the case. It is unclear how potential litigation and other efforts to repeal and replace the ACA will affect the implementation of that law, the pharmaceutical and medical device industries more generally, and our business. Additionally, the 2020 federal spending package permanently eliminated, effective January 1, 2020, the ACA-mandated "Cadillac" tax on high-cost employer-sponsored health coverage and medical device tax and, effective January 1, 2021, also eliminates the health insurer tax. In addition, CMS published a final rule that would give states greater flexibility, effective January 1, 2020, in setting benchmarks for insurers in the individual and small group marketplaces, which may have the effect of relaxing the essential health benefits required under the ACA for plans sold through such marketplaces. We continue to evaluate the potential impact of the ACA and its possible repeal or replacement on our business.

In addition, other legislative changes have been proposed and adopted since the ACA was enacted. These changes include aggregate reductions to Medicare payments to providers of up to 2% per fiscal year pursuant to the Budget Control Act of 2011, which began in 2013 and will remain in effect through 2031 unless additional Congressional action is taken. However, the Medicare sequester reductions were temporarily suspended due to the COVID-19 pandemic. The Medicare sequester reductions phased back in starting with a 1% reduction in effect from April 1, 2022 to June 30, 2022 before increasing to the full 2% reduction.

On January 2, 2013, the American Taxpayer Relief Act of 2012 was signed into law, which, among other things, further reduced Medicare payments to several types of providers, including hospitals, imaging centers, and cancer treatment centers. The Medicare Access and CHIP Reauthorization Act of 2015, enacted on April 16, 2015, or MACRA, repealed the formula by which Medicare made annual payment adjustments to physicians and replaced the former formula with fixed annual updates and a new system of incentive payments that began in 2019 and are based on various performance measures and physicians' participation in alternative payment models, such as accountable care organizations. Individual states in the U.S. have also become increasingly aggressive in passing legislation and implementing regulations designed to control medical product pricing, including price or patient reimbursement constraints and discounts, and require marketing cost disclosure and transparency measures. Most recently, the Biden Administration has indicated that lowering healthcare costs and ensuring equitable patient access to medical care is a priority, but we do not yet know what steps the administration will take or whether such steps will be successful.

We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative or executive action, either in the United States or abroad. We expect that additional state and federal health care reform measures will be adopted in the future, any of which could limit the amounts that federal and state governments will pay for health care products and services. Moreover, if we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, our medical devices may lose any marketing authorization that may have been obtained and we may not achieve or sustain profitability, which would adversely affect our business.

Human Capital

As of February 6, 2023, we had 213 employees, 123 of whom were engaged directly in research, development, regulatory and clinical activities, 51 in manufacturing and quality assurance and 39 in marketing, sales, and administrative activities.

Diversity, Equity and Inclusion

We recognize the value associated with the development of an inclusive work environment, where employees experience a sense of belonging. We further recognize the vital role of DE&I not only to our employees, but in our relationships with our customers and suppliers. Our goal is to cultivate a respectful and professional culture where all voices are heard and valued. We regularly conduct employee engagement and pulse surveys with questions focused on DE&I in order to identify themes and trends, so that we know where to focus our efforts.

Diverse Talent Recruitment & Hiring

Our interview teams and hiring managers are equipped with a structured approach to interviewing and hiring. This ensures that each candidate is evaluated consistently against job specific competencies leading to objective and fair hiring decisions. Our Talent Acquisition Partners are trained to recognize and address any potential unconscious biases. We intentionally identified "Respect for Differences" as one of our core management competencies, as we expect our leaders to serve as role models for valuing people of different backgrounds, cultures, and demographics.

Employee Compensation and Benefits

Employees at all levels of our organization are eligible for a company bonus and equity program. In addition, we offer a competitive base salary and a full suite of benefits that we regularly review to ensure that those benefits continue to meet the needs of our employees. Compensation and benefits are paired with talent management programs to retain and develop our team, and to attract new talent.

Physical, mental, and financial wellness are front and center in our benefits offerings. We provide access to external experts and resources to assist employees and their families. Additionally, we offer incentives and rewards to encourage healthy behaviors. Financially, we provide access to a financial advisory service, access to an online financial wellness assessment and education service, free webinars, and offer a company 401(k) match.

Facilities

Our principal executive offices are currently located at 78 Fourth Avenue, Waltham, Massachusetts 02451, consisting of approximately 42,000 square feet. On October 14, 2021, we entered into a lease amendment pursuant to which we agreed to lease additional space consisting of approximately 30,000 square feet located at 62 Fourth Avenue Waltham, MA 02451. Pursuant to the lease amendment, we also extended the term of the original lease for an additional period of three years and one month. Both leased spaces will expire conterminously on March 31, 2032, with an option to renew for an additional five years until March 31, 2037.

Information Available on the Internet

Our internet address is *https://www.vicarioussurgical.com*, to which we regularly post copies of our press releases as well as additional information about us. We also maintain an Investor Relations website as a routine channel for distribution of important information, including news releases, presentations, and financial statements (*https://investor.vicarioussurgical.com*). We intend to use our Investor Relations website as a means of complying with our disclosure obligations under Regulation FD. Accordingly, investors should monitor our Investor Relations website in addition to press releases, Securities and Exchange Commission (the "SEC") filings, and public conference calls and webcasts. Our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and all amendments to those reports, will be available to you free of charge through the Investor Relations section of our website as soon as reasonably practicable after such materials have been electronically filed with, or furnished to, the SEC. The SEC maintains an internet site (*http://www.sec.gov*) that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC. We include our web site address in this Annual Report on Form 10-K only as an inactive textual reference. Information contained in our website does not constitute a part of this report or our other filings with the SEC.

ITEM 1A. RISK FACTORS.

Careful consideration should be given to the following risk factors, in addition to the other information set forth in this Annual Report on Form 10-K, including the section of titled "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and related notes, and in other documents that we file with the SEC, in evaluating our company and our business. Investing in our securities involves a high degree of risk. If any of the events described in the following risk factors actually occur, our business, financial condition, results of operations and future growth prospects could be materially and adversely affected and the trading price of our securities could decline. Our actual results could differ materially from those anticipated in the forward-looking statements as a result of factors that are described below and elsewhere in this Annual Report on Form 10-K.

Risks Related to Our Financial Condition and Capital Requirements

We have a limited operating history on which to assess the prospects for our business, we have not generated any revenue from sales of the Vicarious Surgical System, and have incurred losses since inception. We anticipate that we will continue to incur significant losses for at least the next several years as we develop and commercialize the Vicarious Surgical System for use in ventral hernia repair procedures and future indications.

Since inception, we have devoted substantially all of our financial resources to developing our surgical robot. We have financed our operations primarily through the issuance of equity securities. We have not generated revenue from the sale of the Vicarious Surgical System to date and have incurred significant losses. We generated net income of $5.2 million and incurred a net loss of $35.2 million for the years ended December 31, 2022 and 2021, respectively. The amount of our future net losses will depend, in part, on future sales and on-going development of the Vicarious Surgical System, the rate of our future expenditures and our ability to obtain funding through the issuance of our securities, strategic collaborations or grants. We expect to continue to incur significant losses for at least the next several years as we commercialize the Vicarious Surgical System for use in ventral hernia repair procedures and seeks to develop and commercialize new surgical applications for the Vicarious Surgical System, such as gynecological, urological or other general surgical applications. We anticipate that our expenses will increase substantially if and as we:

- continue to build our sales, marketing and distribution infrastructure to commercialize our Vicarious Surgical System for use in ventral hernia repair procedures;
- continue to develop the Vicarious Surgical System;
- seek to identify, assess, acquire, license and/or develop other product candidates and technologies or components thereof and subsequent generations of our current product candidates and technologies;
- seek to maintain, protect and expand our intellectual property portfolio;
- seek to attract and retain skilled personnel; and
- support our operations as a public company.

Our ability to generate future revenue from the Vicarious Surgical System sales depends heavily on our success in many areas, including but not limited to:

- launching and commercializing current and future uses for the Vicarious Surgical System, either directly or in conjunction with one or more collaborators or distributors;
- obtaining and maintaining regulatory authorization with respect to each application for the Vicarious Surgical System and maintaining regulatory compliance throughout relevant jurisdictions;
- maintaining clinical and economical value for end-users and customers in changing environments;
- addressing any competing technological and market developments;
- negotiating favorable terms in any collaboration, licensing or other arrangements into which we may enter;
- establishing and maintaining distribution relationships with third-parties that can provide adequate (in amount and quality) infrastructure to support market demand for the Vicarious Surgical System; and
- maintaining, protecting and expanding our portfolio of intellectual property rights, including patents, trade secrets and know-how.

We have incurred significant losses since inception. As such, you cannot rely upon our historical operating performance to make an investment or voting decision regarding us.

Since inception, we have engaged in research and development activities. We have financed our operations primarily through the issuance of equity securities. Our accumulated deficit as of December 31, 2022 was $61.6 million. We do not know whether or when we will become profitable. Our ability to generate revenue and achieve profitability depends upon our ability to accelerate the commercialization of the Vicarious Surgical System in line with the demand from new partnerships and our aggressive business strategy. We may be unable to achieve any or all of these goals.

We may need to raise additional funding to develop and commercialize the Vicarious Surgical System and to expand our research and development efforts. This additional financing may not be available on acceptable terms, or at all. Failure to obtain this necessary capital when needed may force us to delay, limit or terminate our product commercialization or development efforts or other operations.

Our operations have consumed substantial amounts of cash since inception. We expect to expend substantial additional amounts to commercialize the Vicarious Surgical System for use in ventral hernia repair procedures and to develop new surgical applications for the Vicarious Surgical System. We expect to use the funds received in connection with the Business Combination to scale our operations, develop and commercialize the Vicarious Surgical System for use in ventral hernia repair procedures, develop new surgical applications for the Vicarious Surgical System, such as gynecological, urological or other general surgical applications, expand internationally, and for working capital and general corporate purposes. We will require additional capital to develop and commercialize the Vicarious Surgical System for abdominal surgeries and to develop the Vicarious Surgical System for new surgical applications. In addition, our operating plans may change as a result of many factors that may currently be unknown to us, and we may need to seek additional funds sooner than planned.

We cannot guarantee that future financing will be available in sufficient amounts or on terms acceptable to us, if at all. Moreover, the terms of any future financing may adversely affect the holdings or the rights of our stockholders and the issuance of additional securities, whether equity or debt, by us, or the possibility of such issuance, may cause the market price of our common stock to decline. The incurrence of indebtedness could result in increased fixed payment obligations, and we may be required to agree to certain restrictive covenants, such as limitations on our ability to incur additional debt, limitations on our ability to acquire, sell or license intellectual property rights and other operating restrictions that could adversely impact our ability to conduct our business. We could also be required to seek funds through arrangements with collaborative partners or otherwise at an earlier stage than otherwise would be desirable, and we may be required to relinquish rights to some of our technologies or otherwise agree to terms that are unfavorable to us, any of which may have a material adverse effect on our business, operating results and prospects. In addition, raising additional capital through the issuance of equity or convertible debt securities would cause dilution to holders of our equity securities, and may affect the rights of then-existing holders of our equity securities. Even if we believe that we have sufficient funds for our current or future operating plans, we may seek additional capital if market conditions are favorable or if we have specific strategic considerations.

Risks Related to Our Business and Operations

We are a development stage company with a limited history of operations and no products with marketing authorization in any jurisdiction, and we cannot assure you that we will ever have a commercialized product.

We are a development stage medical device company with a limited operating history, and we currently do not have any products authorized for commercialization in any country or jurisdiction or any source of revenue. We have been engaged in research and product development since our inception in 2014 and have invested all of our time and resources in developing our technology and the Vicarious Surgical System, which we intend to commercialize initially for use in ventral hernia repair procedures, followed by subsequent indications. The future success of our business will depend on our ability to obtain regulatory authorization to market our Vicarious Surgical System, drive adoption, successfully introduce new surgical applications for the Vicarious Surgical System, establish our sales force and distribution network, and control costs, all of which we may be unable to do. We have a limited history of operations upon which you can evaluate our business and our operating expenses are increasing. Our lack of a significant operating history also limits your ability to make a comparative evaluation of us, the Vicarious Surgical System and our prospects.

If we do not successfully manage the development and launch of the Vicarious Surgical System, we will not meet the long term forecasts we presented to D8 Holdings and our business, operating and financial results and condition could be adversely affected.

We aim to launch the Vicarious Surgical System initially for use in ventral hernia repair procedures, but to later expand the product to other abdominal surgical applications, including gynecological, urological and general surgery uses. We face risks associated with developing and launching the Vicarious Surgical System for the first indication specific use and other surgical applications. We are in the process of developing the Vicarious Surgical System, and will need to complete beta testing, verification and validation prior to filing de novo authorization with FDA. If we encounter development or manufacturing challenges or discovers errors during our development cycle, the launch dates of the initial and new surgical applications may be delayed, which will cause delays in our ability to achieve our forecasted results. The expenses or losses associated with unsuccessful product development or launch activities or lack of market acceptance of the Vicarious Surgical System could adversely affect our business or financial condition.

The market for the Vicarious Surgical System and the use of robotic-assisted surgical technology is rapidly evolving, and increasingly competitive, as the healthcare industry is undergoing significant structural change, which makes it difficult to forecast demand for our product candidates and technologies.

The market for the Vicarious Surgical System and the use of robotic-assisted surgical technology is rapidly evolving, and it is uncertain whether we will achieve and sustain high levels of demand and market adoption. Our future financial performance will depend in part on growth in this market and on our ability to adapt to the changing demands of customers. It is difficult to predict the future growth rate and size of our target market. As a result, the addressable market projections provided to D8 Holdings for purposes of considering the Business Combination may not be achieved. Negative publicity concerning the Vicarious Surgical System could limit market acceptance of the Vicarious Surgical System. If our customers do not perceive the benefits of the Vicarious Surgical System, when or if it is authorized for marketing, or if the Vicarious Surgical System does not attract new customers, then our market may not develop at all, or it may develop more slowly than we expect. Our success will depend to a substantial extent on the willingness of healthcare organizations to increase their use of our technology and our ability to demonstrate the value of our technology relative to competing products to existing and potential customers. If healthcare organizations do not recognize or acknowledge the benefits of the Vicarious Surgical System or if we are unable to reduce healthcare costs or drive positive health outcomes, then the market for our solutions might not develop at all, or it might develop more slowly than we expect.

Because our markets are highly competitive, customers may choose to purchase our competitors' products or services or may not accept the Vicarious Surgical System for use in ventral hernia repair procedures, which would result in a reduced ability to generate future revenue.

Robotic-assisted surgery using the Vicarious Surgical System is a technology that competes with established and emerging treatment options in both disease management and reconstructive medical procedures. These competitive treatment options include conventional open surgery and minimally invasive approaches. Some of these procedures are widely accepted in the medical community and, in many cases, have a long history of use. Studies could be published that show that other treatment options are more beneficial and/or cost-effective than robotic-assisted surgery. We cannot be certain that physicians will use our product candidates to replace or supplement established treatments or that our product candidates will be competitive with current or future technologies, when or if those product candidates are authorized for marketing.

Additionally, we face or expect to face competition from companies that develop or have developed robotic-assisted surgical systems and products. Companies have introduced products in the field of robotic surgery or have made explicit statements about their efforts to enter the field including, but not limited to, the following companies: Intuitive Surgical, Inc.; Johnson & Johnson (including their wholly-owned subsidiaries Ethicon Endo-Surgery, Inc., Auris Health, Inc. and Verb Surgical Inc.); Medtronic plc (including their wholly-owned subsidiary Covidien LP); Virtual Incision Corporation; Titan Medical Inc.; CMR Surgical Ltd.; and Stryker Corporation. Other companies with substantial experience in industrial robotics could potentially expand into the field of surgical robotics and become competitors. Our ability to generate future revenue may be reduced due to pricing pressure if our competitors develop and market products that are more effective or less expensive than our future commercial product candidates. If we are unable to compete successfully, our ability to generate future revenue will suffer, which could have a material adverse effect on our business, financial condition, result of operations, or cash flows.

Our success depends upon market acceptance of the Vicarious Surgical System for use in ventral hernia repair procedures, our ability to develop and commercialize the Vicarious Surgical System for use in ventral hernia repair procedures and additional surgical applications and generate revenues, and our ability to identify new markets for our technology.

We have developed and are engaged in the development of the Vicarious Surgical System initially for use in ventral hernia repair procedures. Achieving physician, patient, and third-party payor acceptance of robotic-assisted surgery as a preferred method of performing surgery is crucial to our success. Our success will depend on the acceptance of the Vicarious Surgical System in the United States and global health care markets, when or if it is authorized for marketing in those jurisdictions. We are faced with the risk that the marketplace will not be receptive to the Vicarious Surgical System over competing products, including traditional and existing robotic-assisted surgical procedures used in hospitals and ambulatory surgical centers, or ASCs, and that we will be unable to compete effectively. Factors that could affect our ability to successfully commercialize the Vicarious Surgical System for use in ventral hernia repair procedures and to commercialize any potential future product candidates and technologies include:

- challenges of developing or acquiring externally-developed technology solutions that are adequate and competitive in meeting the requirements of next-generation design challenges; and

- dependence upon hospitals, ASCs, surgeons and other healthcare practitioners' acceptance of the Vicarious Surgical System.

Even if we can prove the safety and effectiveness of the Vicarious Surgical System and it receives marketing authorization, hospitals, ASCs, or surgeons may elect not to use it. In addition, hospitals, ASCs and surgeons may be slow to adopt the Vicarious Surgical System because of the perceived liability risks arising from the use of new products and the uncertainty of reimbursement from third-party payors, particularly in light of ongoing healthcare reform initiatives and the evolving healthcare environment.

Broad use of the Vicarious Surgical System will require training of surgical teams. We expect that there will be a learning process involved for surgical teams to become proficient in the use of the Vicarious Surgical System. Market acceptance could be delayed due to the time required to complete this training. We may not be able to rapidly train surgical teams in numbers sufficient to generate adequate demand for our product candidates. We cannot assure investors that the Vicarious Surgical System or any future product candidates and technologies will gain broad market acceptance. If the market for the Vicarious Surgical System or any future product candidates and technologies fail to develop or develops more slowly than expected, or do not achieve or sustain market acceptance, our business and operating results would be materially and adversely affected.

Surgeons, hospitals, ASCs and distributors may have existing relationships with other medical device companies that make it difficult for us to establish new relationships with them, and as a result, we may not be able to sell and market the Vicarious Surgical System effectively.

We believe that to sell and market the Vicarious Surgical System effectively, when or if the product receives marketing authorization, we must establish relationships with key surgeons, hospitals and ASCs in the field of abdominal surgery. Many of these key surgeons, hospitals and ASCs already have long-standing relationships with large, well-known companies that dominate the medical device industry through collaborative research programs and other relationships. Because of these existing relationships, some of which may be contractually enforced, surgeons, hospitals and ASCs may be reluctant to adopt the Vicarious Surgical System, particularly if it competes with or has the potential to compete with products and technologies supported by these existing relationships or through their own collaborative research programs. Even if these surgeons, hospitals and ASCs purchase the Vicarious Surgical System, they may be unwilling to enter into collaborative relationships with us to promote joint marketing programs or to provide us with clinical and financial data.

Any failure in our efforts to train surgeons, hospital or ASC staff could result in lower than expected product sales and potential liabilities.

A critical component of our future sales and marketing efforts is the training of a sufficient number of surgeons and hospital staff to properly use the Vicarious Surgical System, when or if it is authorized for marketing. We rely on surgeons and hospital staff to devote adequate time to learn to use our future product candidates and technologies. Convincing surgeons, hospital and ASC staff to dedicate the time and resources necessary for adequate training in the use of the Vicarious Surgical System will be challenging, and we cannot assure you we will be successful in these efforts. If surgeons, hospital or ASC staff are not properly trained, they may misuse or ineffectively use the Vicarious Surgical System. If nurses or other members of the hospital or ASC staff are not adequately trained to assist in using the Vicarious Surgical System, surgeons may be unable to use the Vicarious Surgical System. Insufficient training may result in unsatisfactory patient outcomes, patient injury and related liability or negative publicity, which could have an adverse effect on our product sales or create substantial potential liabilities.

Robotic-assisted surgical device development is costly and involves continual technological change, which may render the Vicarious Surgical System obsolete.

The market for robotic-assisted surgical devices is characterized by rapid technological change, medical advances and evolving industry standards. Any one of these factors could reduce the demand for the Vicarious Surgical System, when or if it is authorized for marketing, or require substantial resources and expenditures for research, design and development to avoid technological or market obsolescence.

Our success will depend on our ability to enhance our current technology, services and systems and develop or acquire and market new technologies to keep pace with technological developments and evolving industry standards, while responding to changes in customer needs. A failure to adequately develop or acquire device enhancements or new devices that will address changing technologies and customer requirements adequately, or to introduce such devices on a timely basis, may have a material adverse effect on our business, financial condition and results of operations.

We might have insufficient financial resources to improve existing devices, advance technologies and develop new devices at competitive prices. Technological advances by one or more competitors or future entrants into the field may result in the Vicarious Surgical System becoming non-competitive or obsolete, which may decrease revenues and profits and adversely affect our business and results of operations.

We may encounter significant competition across our existing and future planned product candidates and technologies and in each market in which we sell or plan to sell the Vicarious Surgical System from various companies, many of which have greater financial and marketing resources than us. Our primary competitors include Intuitive Surgical, Johnson& Johnson (including their wholly-owned subsidiaries Ethicon Endo-Surgery, Inc., Auris Health, Inc. and Verb Surgical Inc.), and Medtronic, which are currently the top manufacturers of robotic-assisted surgical devices.

In addition, our primary competitors, which are well-established medical device manufacturers with significant resources, may engage in aggressive marketing tactics. Competitors may also possess the ability to commercialize additional lines of products, bundle products or offer higher discounts and incentives to customers in order to gain a competitive advantage. If the prices of competing products are lowered as a result, we may not be able to compete effectively.

We are highly dependent upon the continued contributions of our co-founder, Chief Executive Officer and President, Adam Sachs, and our co-founder and Chief Technology Officer, Sammy Khalifa. The loss of their services could harm our business, and if we are unable to attract, recruit, train, retain, motivate and integrate key personnel, we may not achieve our goals.

Our future success depends on our ability to attract, recruit, train, retain, motivate and integrate key personnel, including our co-founder, Chief Executive Officer and President, Adam Sachs, and our co-founder and Chief Technology Officer, Sammy Khalifa, as well as our management team and our research and development, manufacturing, sales and marketing personnel. Our future business and results of operations depend in significant part upon the continued contributions of Messrs. Sachs and Khalifa. If we were to lose their services or if they fail to perform in their current positions, or if we are not able to attract and retain skilled employees in addition to Messrs. Sachs and Khalifa, this could adversely affect the development and implementation of our business plan and substantially harm our business. Competition for qualified personnel is intense.

In addition, we rely upon technical and scientific employees or third-party contractors to effectively establish, manage and grow our business. Consequently, we believe that our future viability will depend largely on our ability to attract and retain highly skilled robotics engineers, artificial intelligence engineers, software engineers, hardware engineers and optical engineers, as well as other managerial, sales, scientific and technical personnel. In order to effectively recruit these personnel, we may need to pay higher compensation or fees to our employees or consultants than we currently expect, and such higher compensation payments may have a negative effect on our operating results. Competition for experienced, high-quality personnel is intense, and we cannot assure investors that we will be able to recruit and retain such personnel. Our growth depends, in particular, on attracting and retaining highly trained sales personnel with the necessary technical background and ability to understand the Vicarious Surgical System at a technical level to effectively identify and sell to potential new customers and develop new uses for the Vicarious Surgical System. Because of the technical and complex nature of the Vicarious Surgical System and the dynamic market in which we compete in, any failure to attract, recruit, train, retain, motivate and integrate qualified personnel could materially delay development of the Vicarious Surgical System and harm our operating results and growth prospects.

We will need to expand our organization, and we may experience difficulties in recruiting needed additional employees and consultants, which could disrupt our operations.

As our development and commercialization plans and strategies develop, we will need additional managerial, operational, sales, marketing, financial, legal and other resources. The competition for qualified personnel in the medical device industry is intense. Due to this intense competition, we may be unable to attract and retain the qualified personnel necessary for the development of our business or to recruit suitable replacement personnel.

Our management may need to divert a disproportionate amount of our attention away from our day-to-day activities and devote a substantial amount of time to managing these growth activities. We may not be able to effectively manage the expansion of our operations, which may result in weaknesses in our infrastructure, operational mistakes, loss of business opportunities, loss of employees and reduced productivity among remaining employees. Our expected growth could require significant capital expenditures and may divert financial resources from other projects, such as the development of additional surgical applications for the Vicarious Surgical System. If our management is unable to effectively manage our growth, our expenses may increase more than expected, our ability to generate and/or grow revenue could be reduced and we may not be able to implement our business strategy. Our future financial performance and our ability to commercialize the Vicarious Surgical System and compete effectively will depend, in part, on our ability to effectively manage any future growth.

We have no experience in marketing and selling the Vicarious Surgical System and if we are unable to successfully commercialize the Vicarious Surgical System, our business and operating results will be adversely affected.

We have no experience marketing and selling the Vicarious Surgical System, should we receive marketing authorization from the FDA and other regulatory authorities. We currently intend to sell the Vicarious Surgical System to hospitals and ASCs. Future sales of the Vicarious Surgical System will depend in large part on our ability to effectively market and sell the Vicarious Surgical System, successfully manage and expand our sales force, and increase the scope of our marketing efforts. We may also enter into distribution arrangements in the future. Because we have limited experience in marketing and selling the Vicarious Surgical System, our ability to forecast demand, the infrastructure required to support such demand and the sales cycle to customers is unproven. If we do not build an efficient and effective marketing and sales force, our business and operating results will be adversely affected.

We expect to generate an increasing portion of our revenue internationally in the future and may become subject to various additional risks relating to our international activities, which could adversely affect our business, operating results and financial condition.

We intend to generate revenues from international sources as we expand our sales and marketing opportunities internationally. We have limited experience operating internationally and engaging in international business involves a number of difficulties and risks, including:

- the challenges associated with building local brand awareness, obtaining local key opinion leader support and clinical support, implementing reimbursement strategies and building local marketing and sales teams;
- required compliance with foreign regulatory requirements and laws, including regulations and laws relating to patient data and medical devices;
- trade relations among the United States and those foreign countries in which our future customers, distributors, manufacturers and suppliers have operations, including protectionist measures such as tariffs and import or export licensing requirements, whether imposed by the United States or such foreign countries;
- difficulties and costs of staffing and managing foreign operations;
- difficulties protecting, procuring or enforcing intellectual property rights internationally;
- required compliance with anti-bribery laws, such as the U.S. Foreign Corrupt Practices Act, data privacy requirements, labor laws and anti-competition regulations;
- laws and business practices that may favor local companies;
- longer payment cycles and difficulties in enforcing agreements and collecting receivables through certain foreign legal systems;
- political and economic instability and war or other military conflict, including the ongoing conflict occurring in Ukraine, which could have a material adverse impact on our sales in Europe and elsewhere; and
- potentially adverse tax consequences, tariffs, customs charges, bureaucratic requirements and other trade barriers.

We dedicate significant resources to our international operations and are unable to manage these risks effectively, our business, operating results and financial condition may be adversely affected.

If we experience decreasing prices for our product candidates and technologies and are unable to reduce our expenses, including the per unit cost of producing our product candidates and technologies, there may be a material adverse effect on our business, results of operations, financial condition and cash flows.

We may experience decreasing prices for the Vicarious Surgical System upon regulatory authorization due to pricing pressure from managed care organizations and other third-party payors and suppliers, increased market power of our payors as the medical device industry consolidates, and increased competition among suppliers, including manufacturing services providers. If the prices for the Vicarious Surgical System decrease and we are unable to reduce our expenses, including the cost of sourcing materials, logistics and the cost to manufacture the Vicarious Surgical System, our business, results of operations, financial condition and cash flows may be adversely affected. To the extent that we engage in sales to large hospital networks, we may be subject to procurement discounts, which could have a negative impact on the prices of our product candidates and technologies.

We may experience manufacturing problems or delays that could limit the growth of our revenue or increase our losses.

We may encounter unforeseen situations that would result in delays or shortfalls in our production as well as delays or shortfalls caused by our outsourced manufacturing suppliers and by other third-party suppliers who manufacture components for the Vicarious Surgical System. The FDA has established comprehensive and prescriptive regulations for manufacturers of finished medical devices and device components, which require them to establish and maintain processes and procedures to adequately control device manufacturing operations and environmental conditions that could adversely affect product quality and impact patient safety. Clean room standards are an example of these requirements. The failure of us or our third-party component manufacturers or suppliers to comply with applicable standards and regulatory requirements could delay the production of the Vicarious Surgical System.

We or our third-party component manufacturers or suppliers may encounter difficulties in scaling up or maintaining production relating to the Vicarious Surgical System, including:

- problems involving production yields;
- quality control and assurance;
- component or material supply shortages;
- import or export restrictions on components, materials or technology;
- shortages of qualified personnel; and
- compliance with state and federal regulations.

If we are unable to keep up with demand for the Vicarious Surgical System, our future revenue could be impaired, market acceptance for the Vicarious Surgical System could be adversely affected and our customers might instead purchase our competitors' products. Our inability to successfully manufacture the Vicarious Surgical System would have a material adverse effect on our operating results.

We rely on limited or sole suppliers for some of the materials and components used in the Vicarious Surgical System, and may not be able to find replacements or immediately transition to alternative suppliers, which could require us to redesign aspects of the Vicarious Surgical System and which would have a material adverse effect on our business, financial condition, results of operations and reputation.

We rely on limited or sole suppliers for certain materials and components that are used in the Vicarious Surgical System. While we periodically forecast our needs for such materials and enters into standard purchase orders with them, we do not have long-term contracts with some of these suppliers. If we were to lose such suppliers, or if such suppliers were unable to fulfill our orders or to meet our manufacturing specifications, there can be no assurance that we will be able to identify or enter into agreements with alternative suppliers on a timely basis or on acceptable terms, if at all. Furthermore, if we are required to change the manufacturer of a key component of the Vicarious Surgical System, we would be required to verify that the new manufacturer maintains facilities and procedures that comply with quality standards and with all applicable regulations and guidelines, and we may be required to redesign aspects of the Vicarious Surgical System to accommodate the new component, which would result in significant delays and additional costs. An interruption in our operations could occur if we encounter delays or difficulties in redesigning the Vicarious Surgical System, or securing these materials and components, or if the quality of the materials and components supplied do not meet our requirements, or if we cannot then obtain an acceptable substitute. The time and effort required to redesign the Vicarious Surgical System, or to qualify a new supplier and ensure that the new materials and components provide the same or better quality results could result in significant additional costs. Any such interruption could significantly affect our business, financial condition, results of operations and reputation. While we believe that our supplies of components and materials are currently sufficient for us to continue the development of our product candidates and technologies without a disruption to our business, in the event that we must replace one of our suppliers, there can be no assurance that we can maintain this level of inventory in the future.

Acquisitions, joint ventures or strategic alliances could disrupt our business, cause dilution to our stockholders and otherwise harm our business.

We may acquire other businesses or product candidates and technologies, as well as pursue strategic alliances, joint ventures, technology licenses or investments in complementary businesses. We have not engaged in any of these strategic transactions to date, except for our Center of Excellence partners, and our ability to do so successfully is unproven. Any of these strategic transactions could be material to our financial condition and operating results and expose us to many risks, including:

- disruption in our relationships with customers, distributors, manufacturers or suppliers as a result of such a transaction;
- unanticipated liabilities related to acquired companies;
- difficulties integrating acquired personnel, technologies and operations into our existing business;
- diversion of management's time and focus away from operating our business to acquisition integration challenges;
- increases in our expenses and reductions in our cash available for operations and other uses; and
- possible write-offs or impairment charges relating to acquired businesses.

Foreign acquisitions involve unique risks in addition to those mentioned above, including those related to the integration of operations across different cultures and languages, currency risks and the particular economic, political and regulatory risks associated with specific countries.

In addition, the anticipated benefit of any acquisition may not materialize. Future acquisitions or dispositions could result in potentially dilutive issuances of our equity securities, the incurrence of debt, contingent liabilities or amortization expenses or write-offs of goodwill, any of which could harm our financial condition. We cannot predict the number, timing or size of future joint ventures, strategic alliances or acquisitions, if any, or the effect that any such transactions might have on our operating results.

If we do not successfully develop, optimize and operate our sales and distribution channels or we do not effectively expand and update infrastructure, our operating results and customer experience may be negatively impacted.

If we do not adequately predict market demand or otherwise develop, optimize and operate our sales and distribution channels successfully, it could result in excess or insufficient inventory or fulfillment capacity, increased costs, or immediate shortages in product or component supply, or harm our business in other ways. In addition, if we do not maintain adequate infrastructure to enable us to, among other things, manage our purchasing and inventory, it could negatively impact our operating results.

If we are unable to continue the development of an adequate sales and marketing organization and/or if our direct sales organization is not successful, we may have difficulty achieving market awareness and selling our product and technologies in the future.

We must develop and grow our sales and marketing organization and enter into partnerships or other arrangements to market and sell our product candidates and technologies and/or collaborate with third parties, including distributors and others, to market and sell our product candidates and technologies to develop and maintain the commercial success of the Vicarious Surgical System, when or if we are authorized for marketing, and to achieve commercial success for any of our future product candidates and technologies. Developing and managing a direct sales organization is a difficult, expensive and time-consuming process.

To develop our sales and marketing organization to successfully achieve market awareness and sell our product candidates and technologies after they receive appropriate marketing authorization, we must:

- continue to recruit and retain adequate numbers of effective and experienced sales and marketing personnel;
- effectively train our sales and marketing personnel in the benefits and risks of the Vicarious Surgical System;
- establish and maintain successful sales, marketing, training and education programs that educate health care professionals so they can appropriately inform their patients about the Vicarious Surgical System;
- manage geographically dispersed sales and marketing operations; and
- effectively train our sales and marketing personnel on the applicable fraud and abuse laws that govern interactions with health care practitioners as well as current and prospective patients and maintain active oversight and auditing measures to ensure continued compliance.

We may not be able to successfully manage our sales force or increase our product sales at acceptable rates.

If we are unable to establish and maintain adequate sales and marketing capabilities or enter into and maintain arrangements with third parties to sell and market the Vicarious Surgical System, our business may be harmed.

We cannot guarantee that we will be able to establish and maintain an adequate volume of sales in the future. A substantial reduction in sales could have a material adverse effect on our operating performance. To the extent that we enter into additional arrangements with third parties to perform sales or marketing services in the United States, Europe or other countries, our product margins could be lower than if we directly marketed and sold the Vicarious Surgical System. To the extent that we enter into co-promotion or other marketing and sales arrangements with other companies, any revenue received will depend on the skills and efforts of others, and we cannot predict whether these efforts will be successful. In addition, the growth of market acceptance of the Vicarious Surgical System by healthcare practitioners outside of the United States will largely depend on our ability to continue to demonstrate the relative safety, effectiveness, reliability, cost-effectiveness and ease of use of the Vicarious Surgical System. If we are unable to do so, we may not be able to increase product revenue from our sales efforts in other countries. If we are unable to establish and maintain adequate sales, marketing and distribution capabilities, independently or with others, our future revenue may be reduced and our business may be harmed.

Quality problems could lead to recalls or safety alerts and/or reputational harm and could have a material adverse effect on our business, results of operations, financial condition and cash flows.

The quality of our product candidates and technologies and future commercial product candidates and technologies is very important to us and our customers due to the serious and costly consequences of product failure. Our success depends on the quality and reliability of the Vicarious Surgical System. Our business exposes us to potential product liability risks that are inherent in the design, manufacture, and marketing of medical devices. While we take measures to ensure that components, product candidates and technologies are manufactured to stringent quality specifications, The Vicarious Surgical System incorporates mechanical parts, electrical components, optical components, packaging and computer software, any of which may contain errors or exhibit failures, especially when the finished system is first introduced. In addition, new product candidates or modifications may contain undetected errors or performance problems that, despite testing, are discovered only after marketing authorization and commercial shipment. Because the Vicarious Surgical System is being designed to perform complex surgical procedures, due to the serious and costly consequences of product failure, we and our future customers have an increased sensitivity to such defects.

Although the Vicarious Surgical System is subject to stringent quality processes and controls, we cannot provide assurance that our system will not experience component aging, errors, performance problems, manufacturing nonconformities, or design defects or that unexpected risks to users or patients will not be discovered during commercial use. If we experience product flaws or performance problems, any or all of the following could occur:

- delays in shipments;
- loss of revenue;
- delay in market acceptance;
- diversion of resources;
- damage to reputation;

- product recalls;
- regulatory actions;
- increased service or warranty costs; or
- product liability claims.

Additionally, the manufacture and production of the Vicarious Surgical System requires a highly controlled and clean environment to minimize particles and other yield- and quality-limiting contaminants. Weaknesses in process control or minute impurities in materials may result in defective products. If we are not able to maintain stringent quality controls, or if contamination problems arise, we may experience delays in development and commercialization efforts and may be subject to regulatory enforcement actions, which would harm our business and results of operations.

If we or our third-party component manufacturers or suppliers fail to meet any applicable product quality standards and the Vicarious Surgical System is the subject of recalls, safety alerts or other regulatory enforcement actions, our reputation could be damaged, we could lose customers, and our revenue and results of operations could decline.

If we are not able to develop and release new surgical applications for the Vicarious Surgical System, or successful enhancements, new features and modifications to the Vicarious Surgical System or to achieve adequate clinical utility, our business, financial condition and results of operations could be adversely affected.

The markets in which we operate are characterized by rapid technological change, frequent new product and service introductions and enhancements, changing customer demands, and evolving industry standards. The introduction of products embodying new technologies can quickly make existing products obsolete and unmarketable. Additionally, changes in laws and regulations could impact the usefulness of the Vicarious Surgical System and could necessitate changes or modifications to the Vicarious Surgical System to accommodate such changes. We invest substantial resources in researching and developing new developments to the Vicarious Surgical System and enhancing the Vicarious Surgical System by incorporating additional features, improving functionality, and adding other improvements to meet customers' evolving needs. The success of any enhancements, improvements or any new features to the Vicarious Surgical System, when or if authorized for marketing by the FDA, depends on several factors, including timely completion, competitive pricing, adequate quality testing, integration with new and existing technologies and third-party partners' technologies and overall market acceptance. We may not succeed in developing, marketing and delivering on a timely and cost-effective basis enhancements or improvements to the Vicarious Surgical System or any new product candidates and technologies that respond to continued changes in market demands or new customer requirements, and any enhancements or improvements to the Vicarious Surgical System or any new solutions may not achieve market acceptance or authorization. Since developing the Vicarious Surgical System is complex, the timetable for the release of new enhancements is difficult to predict, and we may not offer new updates as rapidly as our customers require or expect. Any new product candidates and technologies that we develop may not be introduced in a timely or cost-effective manner, may contain errors or defects, or may not achieve the broad market acceptance necessary to generate sufficient revenue. Moreover, even if we introduce new product candidates and technologies, we may experience a decline in revenue from the Vicarious Surgical System that is not offset by revenue from the new product candidates and technologies. For example, customers may delay making purchases of new product candidates and technologies to permit them to make a more thorough evaluation of these product candidates and technologies or until industry and marketplace reviews become widely available. Customers may also delay purchasing a new product because their existing Vicarious Surgical System or other devices continues to meet their needs. Some customers may hesitate to migrate to a new product due to concerns regarding the performance of the new product. In addition, we may lose existing customers who choose a competitor's products. This could result in a temporary or permanent revenue shortfall and adversely affect our business, financial condition and results of operations.

The introduction of new products and solutions by competitors, the development of entirely new technologies to replace existing offerings or shifts in healthcare benefits trends could make our future commercial products and technologies obsolete or adversely affect our business, financial condition and results of operations. We may experience difficulties with industry standards, design or marketing that could delay or prevent our development, introduction or implementation of new product candidates and technologies, enhancements, additional features or capabilities. If customers do not widely purchase and adopt our future product candidates and technologies, we may not be able to realize a return on our investment. If we do not accurately anticipate customer demand or if we are unable to develop, license or acquire new features and capabilities on a timely and cost-effective basis, or if such enhancements do not achieve market acceptance, it could result in adverse publicity, loss of revenue or market acceptance or claims by customers brought against us, each of which could have a material and adverse effect on our reputation, business, results of operations and financial condition.

The COVID-19 pandemic has and could continue to negatively affect various aspects of our business, which could have a material adverse effect on our business, financial condition, results of operations, or cash flows.

Any outbreak of contagious diseases, or other adverse public health developments, could have a material adverse effect on our business operations. These impacts to our operations have included, and could again in the future include, disruptions or restrictions on the ability of our employees' and customers' to travel or the ability of us to pursue collaborations and other business transactions, oversee the activities of our third-party manufacturers and suppliers and make shipments of materials. We may also be impacted by the temporary closure of the facilities of suppliers, manufacturers or customers. The COVID-19 pandemic may also continue to have an impact on potential customers, as elective surgeries are increasingly postponed and there is greater focus on areas of care with lower profitability, leading, as a consequence, to lower expenditures on new products and devices by health care institutions.

In addition, travel restrictions and business closures have and may in the future adversely impact our operations locally and worldwide, including our ability to manufacture, market, sell or distribute the Vicarious Surgical System, when or if we are authorized by the FDA or other regulatory authorities for marketing, and such restrictions and closure have caused or may cause temporary closures of facilities of suppliers, manufacturers or customers. Any disruption in the operations of our employees, suppliers, customers, manufacturers or access to customers would likely impact our future sales and operating results. In addition, travel restrictions could make it more difficult for us to monitor the quality of our third-party manufacturing operations if we are unable to conduct in-person quality audits of those facilities. The extent to which COVID-19 affects our operations will depend on future developments, which are highly uncertain and cannot be predicted with confidence, including the duration of the outbreak, new information that may emerge concerning the severity of COVID-19 and the actions to contain COVID-19 or treat its impact, among others, which could have an adverse effect on our business and financial condition.

Unfavorable global economic conditions could adversely affect our business, financial condition or results of operations.

Our results of operations could be adversely affected by general conditions in the global economy and in the global financial markets, including changes in inflation, interest rates and overall economic conditions and uncertainties. To the extent inflation or other factors increase our business costs, it may not be feasible to offset higher costs through manufacturing efficiencies. An economic downturn could result in a variety of risks to our business, including weakened demand for our future product candidates and technologies and our inability to raise additional capital when needed on acceptable terms, if at all. A weak or declining economy could also result in further constraints on our third-party component manufacturers and suppliers or cause future customers to delay making payments for our product candidates and technologies. Any of the foregoing could harm our business and we cannot anticipate all of the ways in which the current economic climate and financial market conditions could adversely affect our business.

Geopolitical conflicts could potentially affect our sales and disrupt our operations and could have a material adverse impact on the Company.

Geopolitical conflicts, including the ongoing war in Ukraine, could adversely impact our operations or those of our suppliers, manufacturers or customers. The extent to which these events impact our operations will depend on future developments, which are highly uncertain and cannot be predicted with confidence. If the uncertainty surrounding geopolitical conflicts and in the global marketplace continues, or if we, or any of our suppliers, manufacturers or customers encounter any disruptions to our or their respective operations or facilities, then we or they may be prevented or delayed from effectively operating our or their business, respectively, and the marketing and sale of our product candidates and our financial results could be adversely affected.

The requirements of being a public company may strain our resources and divert management's attention, which could adversely affect our business, results of operations, and financial condition.

We have incurred and will continue to incur significant legal, accounting and other expenses that we did not incur as a private company, including costs associated with public company reporting requirements. We will also continue to incur costs associated with corporate governance requirements, including requirements under the Sarbanes-Oxley Act, as well as rules implemented by the SEC and the NYSE. We expect that the requirements of these rules and regulations will continue to increase our legal, accounting, and financial compliance costs, make some activities more difficult, time-consuming, and costly, and place significant strain on our personnel, systems, and resources. For example, our management team will need to devote substantial time regarding operations as a public company and compliance with applicable laws and regulations. As a result of the complexity involved in complying with the rules and regulations applicable to public companies, our management's attention may be diverted from other business concerns, which could harm our business, results of operations, and financial condition.

We have identified a material weakness in our internal control over financial reporting. If we are unable to successfully remediate this material weakness in our internal control over financial reporting, we may not be able to report our financial condition or results of operations accurately or in a timely manner, which may adversely affect investor confidence in us and, as a result, materially and adversely affect our business and the value of our Class A common stock.

We have identified material weaknesses in our internal control over financial reporting for the years ended December 31, 2022, and 2021. The material weaknesses we identified were as follows:

- we did not maintain an effective control environment as we did not maintain a sufficient complement of accounting and financial reporting resources commensurate with our financial reporting requirements.
- we did not maintain an effective risk assessment process, which led to improperly designed controls.
- we did not maintain appropriate control activities to support the appropriate segregation of duties over the review of account reconciliations and manual journal entries, and safeguarding of assets.
- we did not design and implement controls related to information technology, including access and change management.
- we did not document, thoroughly communicate and monitor controls processes and relevant accounting policies and procedures.

These material weaknesses could result in a misstatement of account balances or disclosures that would result in a material misstatement to our annual or interim financial statements that would not be prevented or detected. Had we performed an evaluation of our internal control over financial reporting in accordance with Section 404, additional control deficiencies may have been identified by management, and those control deficiencies could have also represented one or more material weaknesses.

In an effort to remediate the material weaknesses, we have retained an accounting consulting firm to provide additional depth and breadth in our technical accounting and financial reporting capabilities. We have also hired additional qualified accounting and finance personnel to provide needed levels of expertise in our internal accounting function and maintain appropriate segregation of duties. We intend to complete an appropriate risk assessment to identify relevant risks and specify needed objectives. We intend to formalize and communicate our policies and procedures surrounding our financial close, financial reporting and other accounting processes. We intend to further develop and document necessary policies and procedures regarding our internal control over financial reporting, such that we are able to perform a Section 404 analysis of our internal control over financial reporting when and as required. We cannot assure you that these measures will significantly improve or remediate the material weaknesses described above. We also cannot assure you that we have identified all or that we will not have additional material weaknesses in the future. Accordingly, a material weakness may still exist when we report on the effectiveness of our internal control over financial reporting for purposes of our attestation when required by reporting requirements under the Exchange Act or Section 404 after the Merger. Further, while we remain an emerging growth company, we will not be required to include an attestation report on internal control over financial reporting issued by our independent registered public accounting firm.

We expect to incur additional costs to remediate these control deficiencies, though there can be no assurance that our efforts will be successful or avoid potential future material weaknesses. If we are unable to successfully remediate our existing or any future material weaknesses in our internal control over financial reporting, or if we identify any additional material weaknesses, the accuracy and timing of our financial reporting may be adversely affected, we may be unable to maintain compliance with securities law requirements regarding timely filing of periodic reports in addition to applicable stock exchange listing requirements, investors may lose confidence in our financial reporting, and our stock price may decline as a result. We also could become subject to investigations by NYSE, the SEC or other regulatory authorities.

Our ability to use net operating losses to offset future income may be subject to certain limitations.

As of December 31, 2022, we had federal net operating loss carry forwards ("NOLs") to offset future taxable income of approximately $103.2 million, of which approximately $2.8 million will expire at various dates from 2034 through December 31, 2037, if not utilized. A lack of future taxable income would adversely affect our ability to utilize these NOLs. In addition, under Section 382 of the Code, a corporation that undergoes an "ownership change" is subject to limitations on its ability to utilize its pre-change NOLs and other pre-change tax attributes (such as research tax credits) to offset post-change taxable income. For these purposes, an ownership change generally occurs where the equity ownership of one or more stockholders or groups of stockholders who owns at least 5% of a corporation's stock increases its ownership by more than 50 percentage points over its lowest ownership percentage within a three-year period (calculated on a rolling basis). Our existing NOLs may be subject to limitations arising out of previous ownership changes and we may be limited as to the amount that can be utilized each year as a result of such previous ownership changes. In addition, future changes in our stock ownership, including future offerings, as well as other changes that may be outside of our control, could result in additional ownership changes under Section 382 of the Code. Our NOLs may also be impaired under similar provisions of state law. We have not conducted a study to assess whether an ownership change has occurred, whether there have been multiple ownership changes since inception or whether there has been an ownership change as the result of the Business Combination due to the significant complexity and costs associated with such a study. We have recorded a full valuation allowance related to our NOLs and other deferred tax assets due to the uncertainty of the ultimate realization of the future benefits of those assets.

In addition to the limitations discussed above under Sections 382 of the Code, the utilization of NOLs incurred in taxable years beginning after December 31, 2017, are subject to limitations, as modified by the Coronavirus Aid, Relief, and Economic Security Act, or the CARES Act. In general, NOLs generated in taxable years beginning after December 31, 2017 may offset no more than 80 percent of such year's taxable income and there is no ability for such NOLs to be carried back to a prior taxable year. The CARES Act modifies this limitation on the deduction of NOLs and provides that NOLs arising in taxable years beginning after December 31, 2017 and before January 1, 2021, may be carried back to each of the five taxable years preceding the tax year of such loss, but NOLs arising in taxable years beginning after December 31, 2020 may not be carried back. In addition, the CARES Act eliminates the limitation on the deduction of NOLs to 80 percent of current year taxable income for taxable years beginning before January 1, 2021. As a result of such limitation, we may be required to pay federal income tax in some future year notwithstanding that we have a net loss for all years in the aggregate.

Changes in our effective tax rate or disallowance of our tax positions may adversely affect our financial position and results of operations.

We are subject to income and other taxes in the United States and foreign jurisdictions. The amount of income taxes we pay is subject to our interpretation and application of tax laws in jurisdictions in which we file. Changes in current or future laws or regulations, the imposition of new or changed tax laws or regulations or new interpretations by taxing authorities or courts could affect our results of operations and lead to volatility with respect to tax expenses and liabilities from period to period. For example, limitations on the ability of taxpayers to claim and utilize foreign tax credits and the deferral of certain tax deductions until earnings outside of the United States are repatriated to the United States could impact the tax treatment of future foreign earnings. In addition, on August 16, 2022, the U.S. government enacted the Inflation Reduction Act of 2022, or the Inflation Reduction Act, into law, which includes a new corporate alternative minimum tax beginning in fiscal 2024 and an excise tax of 1% tax on the fair market value of net stock repurchases made after December 31, 2022. We are evaluating the potential impact the Inflation Reduction Act may have on our financial position and results of operations.

We could be adversely affected by violations of the U.S. Foreign Corrupt Practices Act and other worldwide anti-bribery laws by us or our agents.

We are subject to the U.S. Foreign Corrupt Practices Act, or the FCPA, which prohibits companies and their intermediaries from making payments in violation of law to non-U.S. government officials for the purpose of obtaining or retaining business or securing any other improper advantage. Our possible future reliance on independent distributors or strategic partners to sell the Vicarious Surgical System internationally demands a high degree of vigilance in enforcing our policy against participation in corrupt activity, because these distributors or strategic partners could be deemed to be our agents, and we could be held responsible for their actions. Other U.S. companies in the medical device and pharmaceutical fields have faced criminal penalties under the FCPA for allowing their agents to deviate from appropriate practices in doing business with such non-U.S. government officials. We are also subject to similar anti-bribery laws in the jurisdictions in which we plan to operate, including the United Kingdom's Bribery Act of 2010, which also prohibits commercial bribery and makes it a crime for companies to fail to prevent bribery. We have limited experience in complying with these laws and in developing procedures to monitor compliance with these laws by our agents. These laws are complex and far-reaching in nature, and, as a result, we cannot assure investors that we would not be required in the future to alter one or more of our practices to be in compliance with these laws or any changes in these laws or the interpretation thereof.

Any violations of these laws, or allegations of such violations, could disrupt our operations, involve significant management distraction, involve significant costs and expenses, including legal fees, and could result in a material adverse effect on our business, prospects, financial condition, or results of operations. We could also incur severe penalties, including criminal and civil penalties, disgorgement, and other remedial measures.

Risks Related to Health Care Industry Shifts and Changing Regulations

We are subject to extensive government regulation, which could restrict the development, marketing, sale and distribution of our product candidates and technologies and could cause us to incur significant costs.

We and the Vicarious Surgical System are subject to extensive pre-market and post-market regulation by the FDA and various other federal, state, local and foreign government authorities. Government regulation of medical devices is meant to assure their safety and effectiveness, and includes requirements for, among other things:

- design, development and manufacturing processes;
- labeling, content and language of instructions for use and storage;
- product testing, pre-clinical studies and clinical trials (if applicable);
- regulatory authorization, including but not limited to pre-market clearance or pre-market approval;
- establishment registration, device listing and ongoing compliance with the QSR requirements;
- advertising and promotion;
- marketing, sales and distribution;
- conformity assessment procedures;
- product traceability and record-keeping procedures;
- review of product complaints, complaint reporting, recalls and field safety corrective actions;
- post-market surveillance, including reporting of deaths or serious injuries and malfunctions that, if they were to recur, could lead to death or serious injury;
- post-market studies (if applicable); and
- product import and export.

The laws and regulations to which we and our product candidates, technologies and future commercial product candidates will be subject are complex and subject to periodic changes. Regulatory changes could result in restrictions on our ability to carry on or expand our operations, and may result in higher than anticipated costs or lower than anticipated sales.

Before a new medical device, or a significant modification of a medical device, including a new use of, or claim for, an existing product, can be marketed in the United States, it must first receive either 510(k) clearance, de novo authorization, or premarket approval ("PMA") from the FDA, unless an exemption applies. In the 510(k) clearance process, the FDA must determine that a proposed device is "substantially equivalent" to a device legally on the market, known as a "predicate" device, with respect to intended use, technology and safety and effectiveness, in order to clear the proposed device for marketing. Clinical data is sometimes required to support substantial equivalence.

Obtaining marketing authorization for Class II or III medical devices through the 510(k) premarket notification process, the PMA process, or the de novo classification process can be expensive and time-consuming, and entails significant user fees to the FDA, unless an exemption is available. The FDA's review of premarket notifications for 510(k) clearance usually takes 90 to 180 days and review of de novo classification applications usually takes 120 to 280 days, but both review processes can last longer. In addition, after a device is cleared or authorized under a reclassification order, any modification that could significantly affect the device's safety or effectiveness, or that would constitute a major change in its intended use, will require a new clearance, or possibly another de novo authorization or a PMA, depending on the extent of the modification and the associated risks.

The de novo classification process allows a manufacturer whose novel device is automatically classified into Class III to request down-classification of its device to Class I or Class II, on the basis that the device presents low or moderate risk, as an alternative to following the typical Class III device pathway requiring the submission and approval of a PMA application. Under the Food and Drug Administration Safety and Innovation Act of 2012, the FDA is required to classify a device within 120 days following receipt of the de novo classification request from an applicant; however, the most recent FDA premarket review goals state that in fiscal year 2023, FDA will attempt to issue a decision within 150 days of receipt on of all de novo classification requests received during the year. If the manufacturer seeks reclassification into Class II, the classification request must include a draft proposal for special controls that are necessary to provide a reasonable assurance of the safety and effectiveness of the medical device. The FDA may reject the classification request if it identifies a legally marketed predicate device that would be appropriate for a 510(k) notification or determines that the device is not low to moderate risk or that general controls would be inadequate to control the risks and special controls cannot be developed. De novo classification requests are subject to user fees, unless a specific exemption applies.

In the PMA approval process, the FDA must determine that a proposed device is safe and effective for its intended use based, in part, on extensive data, including but not limited to, technical, pre-clinical, clinical trial, manufacturing and labeling data. The process for obtaining a PMA is more costly and uncertain and approval can take anywhere from 180 days to, in some cases, more than one year from the time the application is initially filed with the FDA. Modifications to devices that are approved through a PMA application generally require FDA approval of a supplemental PMA application. The Vicarious Surgical System and some of our future product candidates and technologies may require PMA approval. In addition, the FDA may require that we obtain a PMA prior to marketing future changes of the Vicarious Surgical System. Further, we may not be able to obtain additional 510(k) clearances, de novo authorizations, or PMAs for new product candidates and technologies or for modifications to, or additional indications for, the Vicarious Surgical System in a timely fashion or at all. Delays in obtaining future clearances, authorizations, or approvals could adversely affect our ability to introduce new or enhanced product candidates and technologies in a timely manner, which in turn could harm our revenue and future profitability.

In order to conduct a clinical investigation involving human subjects for the purpose of demonstrating the safety and effectiveness of a medical device, if necessary, for a PMA application, 510(k) premarket notification or de novo classification request, a company must, among other things, apply for and obtain institutional review board (IRB) approval of the proposed investigation. In addition, if the clinical study involves a "significant risk" (as defined by the FDA) to human health, the sponsor of the investigation must also submit and obtain FDA approval of an investigational device exemption (IDE) application and follow applicable IDE regulations. Unless IDE-exempt, nonsignificant risk devices are still subject to certain abbreviated IDE requirements; however, an IDE application is not required if such abbreviated requirements are met. We may not be able to obtain any necessary FDA and/or IRB approval to undertake clinical trials in the United States for future devices we develop and intend to market in the United States. If we do obtain such approvals, the FDA may find that our studies do not comply with the IDE or other regulations governing clinical investigations or the data from any such trials may not support marketing authorization of the investigational device. Moreover, certainty that clinical trials will meet desired endpoints, produce meaningful or useful data and be free of unexpected adverse effects, or that the FDA will accept the validity of foreign clinical study data (if applicable) cannot be assured, and such uncertainty could preclude or delay marketing authorization resulting in significant financial costs and reduced revenue.

To ensure compliance with regulatory requirements, medical device manufacturers are subject to post-market surveillance and periodic, pre-scheduled and unannounced inspections by the FDA or other regulatory authorities, and these inspections may include the manufacturing facilities of our subcontractors.

We, as well as our third-party manufacturers or suppliers that are regulated by the FDA, is also subject to numerous post-marketing regulatory requirements, which include quality system regulations related to the manufacture of the Vicarious Surgical System, labeling regulations and MDR regulations. The last of these regulations requires us to report to the FDA if our commercial devices cause or contribute to a death or serious injury, or malfunction in a way that would likely cause or contribute to a death or serious injury if the malfunction recurred. The failure to comply with applicable regulatory requirements can result in enforcement actions by the FDA, which may include any of the following sanctions:

- untitled letters, warning letters, fines, injunctions, consent decrees and civil penalties;
- customer notifications, or orders for repair, replacement or refunds;
- voluntary or mandatory recalls, detentions or seizures of product candidates;
- operating restrictions, including total or partial suspension of production;
- delays in the introduction of product candidates into the market;
- delay or refusal of for the FDA to grant 510(k) clearances, PMA approvals or de novo classification orders for new product candidates or new intended uses or modifications to authorized products;
- rescission of 510(k) clearance, de novo authorizations, or suspension or withdrawal of PMAs that have already been granted; or
- in the most serious cases, criminal prosecution.

The occurrence of any of these events may have a material adverse effect on our business, financial condition and results of operations.

There is no guarantee that the FDA will grant marketing authorization for the Vicarious Surgical System or any of our future product candidates and technologies, and failure to obtain necessary marketing authorization for the Vicarious Surgical System and our future product candidates and technologies would adversely affect our ability to grow our business.

The Vicarious Surgical System and our new or modified product candidates and technologies will require FDA marketing authorization before they may be marketed in the United States. The FDA may refuse our requests for pre-market review of new product candidates and technologies or may not grant marketing authorization for these product candidates and technologies for the indications that are necessary or desirable for successful commercialization. Early stage review may also result in delays or other issues. For example, the FDA has issued guidance intended to explain the procedures and criteria used in assessing whether pre-market review submissions may be accepted for substantive review. Under the "Refuse to Accept" guidance, the FDA conducts an early review against specific acceptance criteria to notify applicants whether a pre-market submission for a device is administratively complete, and if not, such notification will identify the missing element(s). Applicants are given the opportunity to provide the FDA with any information identified as missing. If the information is not provided within a specified time, the submission will not be accepted for FDA review and will be considered abandoned. The FDA may also change its marketing authorization policies, adopt additional regulations or revise existing regulations, or take other actions that may prevent or delay authorization of our product candidates and technologies under development or impact our ability to obtain marketing authorization for modifications to our authorized products in a timely manner. Significant delays in receiving or failure to receive FDA marketing authorization for our new product candidates and technologies would have an adverse effect on our ability to expand our business.

Unsuccessful animal studies, clinical trials or procedures relating to product candidates and technologies under development could have a material adverse effect on our prospects.

The regulatory clearance, authorization, or approval process for new device product candidates, technologies and new indications for existing device product candidates and technologies requires extensive data and procedures, including the development of regulatory and quality standards and, potentially, studies involving animals or human subjects. Based on pre-submission communications with the FDA, we intend to file a de novo classification request for the Vicarious Surgical System with respect to use in ventral hernia procedures, which would require human clinical studies to ensure that the product candidate is safe and effective. Unfavorable or inconsistent data from future animal studies, clinical trials or other studies conducted by us or third parties, or perceptions regarding such data, could adversely affect our ability to obtain necessary device regulatory authorization and the market's view of our future prospects.

Failure to successfully complete any required studies in a timely and cost-effective manner could have a material adverse effect on our prospects with respect to the Vicarious Surgical System or other product candidates and technologies. Because animal studies, clinical trials and other types of scientific studies are inherently uncertain, there can be no assurance that these trials or studies will be completed in a timely or cost-effective manner, be suitable to support marketing authorization or result in a commercially viable product. Clinical trials or other studies may experience significant setbacks even if earlier preclinical or animal studies have shown promising results. Furthermore, preliminary results from animal studies or clinical trials may be contradicted by subsequent clinical analysis. Results from animal studies or clinical trials may also not be supported by actual long-term studies or clinical experience. If preliminary study results are later contradicted, or if initial results cannot be supported by actual long-term studies or clinical experience, our business could be adversely affected. Clinical trials also may be suspended or terminated by us, the FDA, the responsible IRB or other regulatory authorities at any time if it is believed that the trial participants face unacceptable health risks. The FDA may disagree with our interpretation of the data from the animal studies or clinical trials, or may find the design, conduct or results of such studies or trials inadequate to demonstrate safety and effectiveness of the product candidate. The FDA may also require additional pre-clinical studies or clinical trials for use in ventral hernia procedures or other indications, which could further delay authorization of our product candidates and technologies.

Recent initiatives by the FDA to enhance and modernize various regulatory pathways for device products and technologies and its overall approach to safety and innovation in the medical technology industry creates the possibility of changing product development costs, requirements, and other factors and additional uncertainty for our product candidates, technologies and business.

Regulatory requirements may change in the future in a way that adversely affects us. Any change in the laws or regulations that govern pre-market authorization processes or the post-market compliance requirements relating to our current and future product candidates could make it more difficult and costly to obtain marketing authorization for new product candidates, or to produce, market and distribute existing product candidates that receive such authorization.

For example, the FDA and other government agencies have been focusing on the cybersecurity risks associated with certain medical devices and encouraging device manufacturers to take a more proactive approach to assessing the cybersecurity risks of their devices both during development and on a periodic basis after the devices are in commercial distribution. These regulatory efforts could lead to new FDA requirements in the future or additional product liability or other litigation risks if the Vicarious Surgical System is considered to be susceptible to third-party tampering. In December 2016, Congress passed the 21st Century Cures Act, which made multiple changes to the FDA's rules for medical devices as well as for clinical trials, and in September 2022, Congress passed the most recent iteration of the five-year medical device user fee reauthorization package. In recent years, the FDA has announced a series of efforts to modernize and streamline the 510(k) notification and regulatory review process and monitoring post-market safety, and issued a final rule to formalize the de novo classification process to provide clarity to innovative device developers. Changes in the FDA 510(k) process could make clearance more difficult to obtain, increase delay, add uncertainty and have other significant adverse effects on our ability to obtain and maintain clearance for our product candidates.

It is unclear at this time whether and how various activities initiated or announced by the FDA to modernize the U.S. medical device regulatory system could affect our business, as some of the FDA's new medical device safety and innovation initiatives have not been formalized and remain subject to change. For example, a 2018 Medical Device Safety Action Plan included a particular focus on post-market surveillance and how to respond when new safety concerns emerge once a product is on the market. The increased attention that the medical technology industry is receiving from regulators, lawmakers, and other stakeholders creates the possibility of unanticipated regulatory and other potential changes to the Vicarious Surgical System and our overall business.

If we fail to obtain regulatory authorizations in other countries for existing or future product candidates, we will not be able to commercialize these product candidates and technologies in those countries.

In order for us to market the Vicarious Surgical System in countries outside of the United States, we must comply with extensive safety and quality regulations in other countries regarding the quality, safety and efficacy of the Vicarious Surgical System. These regulations, such as the requirements for obtaining marketing authorization, including CE mark grant in the European Union, as well as regulatory authorization in the Asia-Pacific region and the time required for regulatory review, vary from country to country. Failure to obtain marketing authorization in any foreign country in which we plan to market the Vicarious Surgical System may harm our ability to generate revenue and harm our business. Marketing authorization requirements and processes vary between countries and can involve additional product testing and additional administrative review periods. The time required to obtain marketing authorization in other countries might differ from that required to obtain FDA authorization. The pre-market review and authorization process in other countries may include all of the risks detailed above regarding FDA clearance, authorization, and approval in the United States, as well as other potential risks relating to delays, refusals, or uncertainties in the application preparation, submission, and review procedures specific to the regulatory processes in such countries. Regulatory authorization of a product in one country does not ensure regulatory authorization in another, but a failure or delay in obtaining marketing authorization in one country may negatively impact the regulatory process in others. Failure to obtain regulatory authorization in other countries or any delay or setback in obtaining such authorization could have the same adverse effects described above regarding FDA authorization in the United States.

If we, our contract manufacturers or our component suppliers are unable to manufacture the Vicarious Surgical System in sufficient quantities, on a timely basis, at acceptable costs and in compliance with regulatory and quality requirements, the manufacturing and distribution of our devices could be interrupted, and our product sales and operating results could suffer.

We and our contract manufacturers and our component suppliers are required to comply with the FDA Quality System Regulation ("QSR"), which is a complex regulatory framework that covers the procedures and documentation of the design, testing, production, control, quality assurance, labeling, packaging, sterilization, storage, distribution and servicing of our devices. We and our contract manufacturers and regulated component suppliers will be subject to periodic unannounced inspections by the FDA and other regulatory authorities to monitor and ensure compliance with post-market regulatory requirements. We cannot assure investors that the FDA or other regulatory authorities will not discover evidence of noncompliance at our facilities or the facilities of our third-party manufacturers or suppliers during a future quality system inspection.

Accordingly, assuming we receive marketing authorization for one or more product candidates, we and our contract manufacturers will continue to expend time, money and effort in all areas of regulatory compliance, including manufacturing, production, product surveillance, and quality control. Failure of us or our third-party manufacturers and component suppliers to adhere to QSR requirements or take adequate and timely corrective action in response to an adverse regulatory inspection finding could delay production of the Vicarious Surgical System and lead to fines, difficulties in obtaining regulatory authorizations recalls, enforcement actions, including injunctive relief or consent decrees, or other consequences, which could have a material adverse effect on our financial condition or results of operations. Any such failure, including the failure of our contract manufacturers, to achieve and maintain the required high manufacturing standards could result in delays or failures in product testing or delivery, cost overruns, increased warranty costs or other problems that could harm our business and prospects.

Our current or future product candidates, products and technologies may be subject to product recalls even after receiving marketing authorization from the FDA. A recall of the Vicarious Surgical System, either voluntarily or at the direction of the FDA, or the discovery of serious safety issues with our future products, could have a significant adverse impact on us.

The FDA and similar governmental bodies in other countries have the authority to require the recall of the Vicarious Surgical System and any accessory devices if we or our third-party manufacturers fail to comply with relevant regulations pertaining to, among other things, manufacturing practices, labeling or if new information is obtained concerning deficiencies in the safety or efficacy of the Vicarious Surgical System. For example, under the FDA's MDR regulations, we are required to report to the FDA any incident in which the Vicarious Surgical System may have caused or contributed to a death or serious injury or in which the Vicarious Surgical System malfunctioned in a manner likely to cause or contribute to death or serious injury if that malfunction were to recur. Repeated incidents of the same or similar adverse events or product malfunctions may result in a voluntary or mandatory product recall, or administrative or judicial seizure or injunction, when warranted. A government-mandated recall may be ordered if the FDA finds that there is a reasonable probability that the device would cause serious, adverse health consequences or death. A voluntary recall by us could occur as a result of a discovery of any material deficiency in a device, such as manufacturing defects, labeling deficiencies, packaging defects or other failures to comply with applicable regulations. It is possible that the FDA could disagree with our initial classification for a voluntary recall. The FDA requires that reports of device corrections or removals intended to reduce a risk to health posed by the device or remedy a violation of the FDCA caused by the device be submitted to the FDA within 10 working days after the correction or removal is initiated. If a change to a device addresses a violation of the FDCA, that change would generally constitute a medical device recall and require submission of a recall report to the FDA.

Recalls of the Vicarious Surgical System would divert managerial and financial resources and have an adverse effect on our reputation, results of operations and financial condition, which could impair our ability to produce the Vicarious Surgical System in a cost-effective and timely manner in order to meet our customers' demands. We may also be subject to product liability claims, be required to bear other costs, or be required to take other actions that may have a negative impact on our future sales and our ability to generate profits. Companies are required to maintain certain records of product withdrawals or removals, even if they are not reportable to the FDA. We may initiate voluntary field actions involving the Vicarious Surgical System in the future that we determine do not require notification to the FDA. If the FDA disagrees with our determinations, the FDA could require us to report those actions as recalls. A future recall, withdrawal, or seizure of any product could materially and adversely affect consumer confidence in our brand, lead to decreased demand for the Vicarious Surgical System and negatively affect our sales. In addition, the FDA could take enforcement action for failing to report recalls when they were conducted by us or one of our agents.

We may be subject to enforcement action if we engage in improper or off-label marketing or promotion of the Vicarious Surgical System, including fines, penalties and injunctions.

The FDA regulates the promotional labeling for our products to ensure that the claims we make are consistent with the relevant marketing authorizations, that there is scientific data to substantiate the claims and that our promotion and advertising is neither false nor misleading. The off-label marketing or false or misleading labeling of our products may harm our image in the marketplace, result in injuries that lead to product liability suits, which could be costly to our business, or result in costly investigations and sanctions from the FDA and other regulatory bodies if we are deemed to have engaged in off-label promotion or false or misleading labeling. In addition to the FDA, depending on the form of marketing authorization that the Vicarious Surgical System and future product candidates and technologies receive, the Federal Trade Commission ("FTC") may have overlapping authority to oversee the advertising of our products and any related services offered by us. The FTC's focus would be on ensuring such advertising is truthful, adequately substantiated, and not deceptive under the FTC Act rather than enforcing any of the regulatory requirements in the FDCA and FDA's implementing regulations.

In August 2021, the FDA issued a final rule revising its regulation governing the types of evidence relevant to determining the "intended use" of a drug or device under the FDCA. The final rule makes clear that intended use is based on the manufacturer's "objective intent" and the manufacturer's knowledge of off-label use does not change a device's intended use.

We are subject to federal, state and foreign laws prohibiting "kickbacks" and false or fraudulent claims, and other fraud and abuse laws, transparency laws, and other health care laws and regulations, which, if violated, could subject us to substantial penalties. Additionally, any challenge to or investigation into our practices under these laws could cause adverse publicity and be costly to respond to, and thus could harm our business.

If we obtain FDA marketing authorization for our Vicarious Surgical System, we will be subject to broadly applicable fraud and abuse and other health care laws and regulations that may constrain the business or financial arrangements and relationships through which we market, sell and distribute any product candidates for which we obtain marketing authorization. Restrictions under applicable federal and state health care laws and regulations include the following:

- the federal Anti-Kickback Statute prohibits, among other things, persons from knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in cash or in kind, to induce or reward, or in return for, either the referral of an individual for, or the purchase, order or recommendation of, any good or service, for which payment may be made under a federal health care program such as Medicare and Medicaid;

- the federal False Claims Act imposes criminal and civil penalties, including civil whistleblower or qui tam actions, against individuals or entities for, among other things, knowingly presenting, or causing to be presented false or fraudulent claims for payment by a federal government program, or making a false statement or record that is material to payment of a false claim or avoiding, decreasing or concealing an obligation to pay money to the federal government;

- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, imposes criminal and civil liability for executing a scheme to defraud any health care benefit program and also imposes obligations, including mandatory contractual terms, with respect to safeguarding the privacy, security and transmission of individually identifiable health information;

- the federal false statements statute prohibits knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false statement in connection with the delivery of or payment for health care benefits, items or services;

- the federal transparency requirements under the Physician Payments Sunshine Act require manufacturers of FDA-authorized, approved or cleared drugs, devices, biologics and medical supplies covered by Medicare or Medicaid to report, on an annual basis, to the Department of Health and Human Services information related to payments and other transfers of value to physicians, teaching hospitals and certain advanced non-physician health care practitioners and physician ownership and investment interests; and

- analogous state laws and regulations such as state anti-kickback and false claims laws and analogous non-U.S. fraud and abuse laws and regulations, may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third-party payors, including private insurers, and some state laws require medical device companies to comply with the device industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government in addition to requiring device manufacturers to report information related to payments to physicians and other healthcare providers or marketing expenditures. State and non-U.S. laws also govern the privacy and security of health information in some circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts.

Efforts to ensure that our business arrangements with third parties comply with applicable health care laws and regulations will involve substantial costs. It is possible that governmental authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law involving applicable fraud and abuse or other health care laws and regulations. If our operations are found to be in violation of any of these laws or any other governmental regulations that may apply to us, we may be subject to significant civil, criminal and administrative penalties, damages, fines, imprisonment, exclusion of products from government funded health care programs, such as Medicare and Medicaid, and the curtailment or restructuring of our operations. If any of the physicians or other health care providers or entities with whom we expect to do business is found to be not in compliance with applicable laws, they may be subject to criminal, civil or administrative sanctions, including exclusions from government funded health care programs.

Health care policy and payment changes may have a material adverse effect on our financial condition and results of operations.

We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative or executive action, either in the United States or abroad. In the United States and in some other jurisdictions, there have been a number of legislative and regulatory changes and proposed changes regarding the health care system that could prevent or delay marketing authorization of our product candidates and technologies or any of our potential future product candidates and technologies, restrict or regulate post-authorization activities, or affect our ability to profitably sell any product candidates and technologies for which we obtain marketing authorization. Increased scrutiny by the U.S. Congress of the FDA's medical device authorization process may significantly delay or prevent marketing authorization, as well as subject us to more stringent product labeling and post-marketing testing and other requirements. Congress also must reauthorize the FDA's user fee programs every five years and often makes changes to those programs, in addition to policy or procedural changes that may be negotiated between the FDA and industry stakeholders as part of this periodic reauthorization process.

In March 2010, Congress passed the ACA, which substantially changed the way health care is financed by both the government and private insurers, and significantly impacts the United States medical device industry. As another example, the 2021 Consolidated Appropriations Act signed into law on December 27, 2020 incorporated extensive health care provisions and amendments to existing laws.

There remain judicial and Congressional challenges to certain aspects of the ACA, and as a result certain sections of the ACA have not been fully implemented or effectively repealed. In particular, in December of 2018, a Texas U.S. District Court Judge ruled that the ACA is unconstitutional in its entirety because the individual mandate was repealed by Congress as part of the Tax Cuts and Jobs Act, effective January 1, 2019. In December 2019, the Fifth Circuit Court of Appeals upheld the district court's ruling that the individual mandate in the ACA was unconstitutional, but remanded the case to the district court to determine whether other reforms enacted as part of the ACA, but not specifically related to the individual mandate or health insurance could be severed from the rest of the ACA so as not to have the law declared invalid in its entirety. On March 2, 2020, the U.S. Supreme Court granted the petitions for writs of certiorari to review this case and allocated one hour for oral arguments, which occurred on November 10, 2020. On February 10, 2021, the Department of Justice sent a letter to the U.S. Supreme Court that stated the new administration believes the individual mandate and its tax penalty are constitutional, and if the Court determines that they are not, the provision can be severed from the remainder of the act. With this letter, the Biden administration reversed the Trump administration position that was presented to the Court. The Trump administration had claimed that the tax provision is unconstitutional and could not be separated from the ACA, making the entire ACA unconstitutional as a result. The U.S. Supreme Court held in a 7–2 opinion that the states and individuals that brought the lawsuit challenging the ACA's individual mandate do not have standing to challenge the law. The U.S. Supreme Court did not reach the merits of the challenge, but the decision ends the case. It is unclear how potential litigation and other efforts to repeal and replace the ACA will affect the implementation of that law, the pharmaceutical and medical device industries more generally, and our business. Additionally, the 2020 federal spending package permanently eliminated, effective January 1, 2020, the ACA-mandated "Cadillac" tax on high-cost employer-sponsored health coverage and medical device tax and, effective January 1, 2021, also eliminates the health insurer tax. In addition, CMS published a final rule that would give states greater flexibility, effective January 1, 2020, in setting benchmarks for insurers in the individual and small group marketplaces, which may have the effect of relaxing the essential health benefits required under the ACA for plans sold through such marketplaces. We continue to evaluate the potential impact of the ACA and its possible repeal or replacement on our business.

The uncertainty around the future of the ACA, and in particular the impact to reimbursement levels, may lead to uncertainty or delay in the purchasing decisions of our future customers, which may in turn negatively impact product sales. If there are not adequate reimbursement levels, our business and results of operations could be adversely affected.

In addition, other legislative changes have been proposed and adopted since the ACA was enacted. These changes include aggregate reductions to Medicare payments to providers of up to 2% per fiscal year pursuant to the Budget Control Act of 2011, which began in 2013 and will remain in effect through 2031 unless additional Congressional action is taken. However, the Medicare sequester reductions were temporarily suspended due to the COVID-19 pandemic. The Medicare sequester reductions phased back in starting with a 1% reduction in effect from April 1, 2022 to June 30, 2022 before increasing to the full 2% reduction.

We cannot predict whether future health care initiatives will be implemented at the federal or state level or in countries outside of the United States in which we may do business in the future, or the effect any future legislation or regulation will have on us.

Inadequate funding for the FDA and other government agencies could hinder their ability to hire and retain key leadership and other personnel, prevent new products and technologies from being developed or commercialized in a timely manner or otherwise prevent those agencies from performing normal business functions on which the operation of our business may rely, which could negatively impact our business.

The ability of the FDA to review and approve, authorize, or clear new medical device products and technologies can be affected by a variety of factors, including government budget and funding levels, ability to hire and retain key personnel and accept the payment of user fees, and statutory, regulatory, and policy changes. Average review times at the FDA have fluctuated in recent years as a result. In addition, government funding of the SEC and other government agencies on which our operations may rely, including those that fund research and development activities, is subject to the political process, which is inherently fluid and unpredictable.

Disruptions at the FDA and other agencies may also increase the time necessary for new products and technologies to be reviewed and/or authorized by necessary government agencies, which would adversely affect our business. For example, over the last several years, the U.S. government has shut down several times, and certain regulatory agencies, such as the FDA and the SEC, have had to furlough critical employees and stop critical activities.

Additionally, if a prolonged government shutdown or slowdown occurs, or if global health concerns prevent the FDA or other regulatory authorities from conducting their regular premarket review, inspections, or other regulatory activities, it could significantly impact the ability of the FDA to timely review and clear, authorize, or approve regulatory submissions, which could have a material adverse effect on our future business. Further, following the completion of the Business Combination and in our operations as a public company, future government shutdowns could impact our ability to access the public markets and obtain necessary capital in order to properly capitalize and continue our operations.

Risks Related to Our Intellectual Property

If we are unable to protect our intellectual property, our ability to maintain any technological or competitive advantage over our competitors and potential competitors would be adversely impacted, and our business may be harmed.

We rely on patent protection as well as trademark, copyright, trade secret and other intellectual property rights protection and contractual restrictions to protect our proprietary technologies, all of which provide limited protection and may not adequately protect our rights or permit us to gain or keep any competitive advantage. If we fail to obtain, maintain, and protect our intellectual property, third parties may be able to compete more effectively against us, and we may lose our technological or competitive advantage. We may also incur substantial litigation costs in our attempts to defend, enforce, recover or restrict the use of our intellectual property.

We cannot assure investors that any of our currently pending or future patent applications will result in granted patents, and we cannot predict how long it will take for such patents to be granted or whether the scope of such patents, if granted, will adequately protect the Vicarious Surgical System from competitors. It is possible that, for any of our patents that have been granted or that may be granted in the future, other parties will design alternatives that do not infringe our patents. Further, we cannot assure investors that other parties will not challenge any patents granted to us or that courts or regulatory agencies will hold our patents to be valid or enforceable. We cannot guarantee investors that we will be successful in defending challenges made against our patents. Any successful third-party challenge to our patents could result in the unenforceability or invalidity of such patents, or to such patents being interpreted narrowly or otherwise in a manner adverse to our interests. Our ability to establish or maintain a technological or competitive advantage over our competitors may be diminished because of these uncertainties. For these and other reasons, our intellectual property may not provide us with any competitive advantage. For example:

- we or our licensors (should we in-license IP in the future) might not have been the first to make the inventions covered by our pending patent applications or granted patents;
- we or our licensors might not have been the first to file patent applications for our inventions. To determine the priority of these inventions, we may have to participate in interference proceedings or derivation proceedings declared by the U.S. Patent and Trademark Office, or USPTO, that could result in substantial cost to us and may be unsuccessful. No assurance can be given that our patent applications or granted patents (or those of our licensors) will have priority over any other patent or patent application involved in such a proceeding;
- other parties may independently develop similar or alternative products and technologies or duplicate any of our product candidates and technologies;
- it is possible that our owned or licensed pending patent applications will not result in granted patents in the United States or foreign jurisdictions, and even if such pending patent applications grant as patents, they may not provide a basis for intellectual property protection of commercially viable products and technologies, may not provide us with any competitive advantages, or may be challenged and invalidated by third parties;
- we may not develop additional proprietary products and technologies and technologies that are patentable;
- the patents of other parties may block us from practicing our technology and thereby have an adverse effect on our business; and
- while we apply for patents covering our product candidates and technologies and uses thereof, as we deem appropriate, we may fail to apply for or obtain patents on important product candidates and technologies and uses thereof in a timely fashion or at all, or we may fail to apply for or obtain patents in potentially relevant jurisdictions.

The strength of patents involves complex legal questions and can be uncertain. Even if one or more patents do successfully issue, third parties may challenge the validity, enforceability, inventorship or scope thereof. Such a challenge may result in such patents being narrowed, invalidated or held unenforceable. If the breadth or strength of protection provided by our patents is threatened, it could dissuade companies from collaborating with us to develop, and threaten our ability to commercialize, our technology. Further, if we encounter delays in clinical trials, the period of time during which we could market our product candidates under patent protection would be reduced. Since patent applications in the United States and most other countries are confidential for a period of time after filing, we cannot be certain that we are the first to file any patent application related to our product candidates.

Even if our patent applications issue as patents, they may not issue in a form that will provide us with any meaningful protection, prevent competitors from competing with us or otherwise provide us with any competitive advantage. Our competitors may be able to circumvent our patents by developing similar or alternative technologies or products in a non-infringing manner. The issuance of a patent is not conclusive as to its scope, validity or enforceability, and our patents may be challenged in the courts or patent offices in the United States and abroad. For example, we may become involved in opposition, interference, derivation, inter partes review or other proceedings challenging our patent rights, and the outcome of any proceedings are highly uncertain. Such challenges may result in the patent claims of our patents being narrowed, invalidated or held unenforceable, which could limit our ability to stop or prevent us from stopping others from using or commercializing similar or identical technology and products, or limit the duration of the patent protection of our technology and product candidates. Given the amount of time required for the development, testing and regulatory review of new technology, patents protecting such technology might expire before or shortly after such technology is commercialized. As a result, our patent portfolio may not provide us with sufficient rights to exclude others from commercializing products similar or identical to our product candidates or otherwise provide us with a competitive advantage.

To the extent our intellectual property offers inadequate protection, or is found to be invalid or unenforceable, we would be exposed to a greater risk of direct competition. If our intellectual property does not provide adequate coverage over our product candidates and technologies and protection against our competitors' products and technologies, our competitive position could be adversely affected, as could our business.

The measures that we use to protect the security of our intellectual property and other proprietary rights may not be adequate, which could result in the loss of legal protection for, and thereby diminish the value of, such intellectual property and other rights.

The patenting process is expensive and time-consuming, and we may not be able to file and prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner. In addition, we may not pursue or obtain patent protection in all relevant markets. It is also possible that we will fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection. Our pending and future patent applications may not result in issued patents that protect our technology or product candidates, in whole or in part. In addition, our existing patents and any future patents we obtain may not be sufficiently broad to prevent others from using our technology or from developing competing products and technologies.

If we delay in filing a patent application, and a competitor files a patent application on the same or a similar technology before we do, we may face a limited ability to secure patent rights. We may not be able to patent the technology at all. Even if we can patent the technology, we may be able to patent only a limited scope of the technology, and the limited scope may be inadequate to protect our product candidates, or to block competitor products that are similar or adjacent to ours. Our earliest patent filings have been published. A competitor may review our published patents and arrive at the same or similar technology advances for our product candidates as we developed. If the competitor files a patent application on such an advance before we do, then we may no longer be able to protect the technology. We may require a license from the competitor, and if the license is not available on commercially-viable terms, then we may not be able to launch our product candidates.

In addition to pursuing patents on our technology, we also rely upon trademarks, trade secrets, copyrights and unfair competition laws and other contractual provisions, to protect our intellectual property and other proprietary rights. Despite these measures, any of our intellectual property rights could be challenged, invalidated, circumvented or misappropriated. In addition, we take steps to protect our intellectual property and proprietary technology by entering into confidentiality agreements and intellectual property assignment agreements with our employees, consultants, corporate partners and, when needed, our advisors. Our suppliers may also have access to the patented technology owned or used by us as well as other proprietary information, and these suppliers are subject to confidentiality provisions under their agreements with us.

Such agreements or provisions may not be enforceable or may not provide meaningful protection for our trade secrets or other proprietary information in the event of unauthorized use or disclosure or other breaches of the agreements, and we may not be able to prevent such unauthorized disclosure. Notwithstanding any such agreements, there is no assurance that our current or former manufacturers or suppliers will not use and/or supply our competitors with our trade secrets, know-how or other proprietary information to which these parties gained access or generated from their relationship with us. This could lead to our competitors gaining access to patented or other proprietary information. Moreover, if a party to an agreement with us has an overlapping or conflicting obligation to a third party, our rights in and to certain intellectual property could be undermined. Monitoring unauthorized disclosure is difficult, and we do not know whether the steps we have taken to prevent such disclosure are, or will be, adequate. If we were to enforce a claim that a third party had illegally obtained and was using our trade secrets, it would be expensive and time-consuming, the outcome would be unpredictable, and any remedy may be inadequate. Courts outside the United States may be less willing to protect trade secrets.

In addition, competitors could purchase our product candidates and technologies and attempt to replicate some or all of the competitive advantages we derive from our development efforts, willfully infringe our intellectual property rights, design around our protected technology or develop their own competitive technologies that fall outside of our intellectual property rights. If our intellectual property does not adequately protect our market share against competitors' products and technologies and methods, our competitive position could be adversely affected, as could our business.

We may need or may choose to obtain licenses from third parties to advance our research or allow commercialization of our current or future product candidates and technologies, and we cannot provide any assurances that we would be able to obtain such licenses.

We may need or may choose to obtain licenses from third parties to advance our research or allow commercialization of our current or future product candidates and technologies, and we cannot provide any assurances that third-party patents do not exist that might be enforced against our current or future product candidates and technologies in the absence of such a license. We may fail to obtain any of these licenses on commercially reasonable terms, if at all. Even if we are able to obtain a license, it may be non-exclusive, thereby giving our competitors access to the same technologies licensed to us. If we could not obtain a license, we may be required to expend significant time and resources to develop or license replacement technology. If we are unable to do so, we may be unable to develop or commercialize the affected product candidates and technologies, which could materially harm our business and the third parties owning such intellectual property rights could seek either an injunction prohibiting our sales, or, with respect to our sales, an obligation on our part to pay royalties, damages and/or other forms of compensation.

Licensing intellectual property involves complex legal, business and scientific issues. Disputes may arise between us and our licensors regarding intellectual property subject to a license agreement, including:

- the scope of rights granted under the license agreement and other interpretation-related issues;
- whether and the extent to which our technology and processes infringe intellectual property of the licensor that is not subject to the licensing agreement;
- our right to sublicense patent and other rights to third parties under collaborative development relationships;
- our diligence obligations with respect to the use of the licensed technology in relation to our development and commercialization of our product candidates and technologies, and what activities satisfy those diligence obligations; and
- the ownership of inventions and know-how resulting from the joint creation or use of intellectual property by our licensors and our partners.

If disputes over licensed intellectual property prevent or impair our ability to maintain the licensing arrangements on acceptable terms, we may be unable to successfully develop and commercialize the affected product, or the dispute may have an adverse effect on our results of operations.

In addition to agreements pursuant to which we in-license intellectual property, we may in the future grant licenses under our intellectual property. Like in-licenses, out-licenses are complex, and disputes may arise between us and our licensees, such as the types of disputes described above. Moreover, our licensees may breach their obligations, or we may be exposed to liability due to our failure or alleged failure to satisfy our obligations. Any such occurrence could have an adverse effect on our business.

The licensing and acquisition of third-party intellectual property rights is a competitive practice, and companies that may be more established, or have greater resources than we do, may also be pursuing strategies to license or acquire third-party intellectual property rights that we may consider necessary or attractive for commercializing our technology. More established companies may have a competitive advantage over us due to their larger size, cash resources, or commercialization capabilities. There can be no assurance that we will be able to successfully complete such negotiations and ultimately acquire the rights to the intellectual property that we may seek to acquire.

We and our partners may be sued for infringing the intellectual property rights of third parties. If that happens, such litigation would be costly and time consuming, and an unfavorable outcome in any such litigation could have a material adverse effect on our business.

Our success also depends on our ability to develop, manufacture, market and sell the Vicarious Surgical System without infringing the proprietary rights of third parties. Numerous U.S. and foreign-issued patents and pending patent applications owned by third parties exist in the fields in which we are developing the Vicarious Surgical System. As part of a business strategy to impede our successful commercialization and entry into new markets, competitors may claim that the Vicarious Surgical System infringes their intellectual property rights and may suggest that we enter into license agreements. Such competitors may bring litigation against us or our partners to enforce such claims.

Such claims may or may not be meritorious, but even if such claims are without merit, we could incur substantial costs and the attention of our management and technical personnel could be diverted in defending us against or settling such claims. Any adverse ruling by a court or administrative body, or perception of an adverse ruling, may have a material adverse effect on our ability to conduct our business and on our finances. Moreover, third parties making claims against us may be able to obtain injunctive relief against us, which could block our ability to offer the Vicarious Surgical System and could result in a substantial award of damages against us. In addition, since we could sometimes agree to indemnify customers, collaborators or licensees, we may have additional liability in connection with any infringement or alleged infringement of third-party intellectual property. Because patent applications can take many years to issue, there may be pending applications, some of which are unknown to us, that may result in issued patents that the Vicarious Surgical System or proprietary technologies infringe. Moreover, we may fail to identify issued patents of relevance or incorrectly conclude that an issued patent is invalid or not infringed by our technology or the Vicarious Surgical System. There is a substantial amount of litigation involving patent and other intellectual property rights in the medical device space in general and in the robotic surgery field in particular. As we face increasing competition and as our business grows, we will likely face claims of infringement. If a third-party claims that we or any of our licensors, customers or collaboration partners infringe a third party's intellectual property rights, we may have to do any or all of the following:

- seek licenses that may not be available on commercially reasonable terms, if at all;
- cease commercializing any infringing product or redesign the Vicarious Surgical System or processes to avoid infringement where in some cases redesign may not be possible or may require substantial monetary expenditures and time;
- pay substantial damages, including treble damages and attorneys' fees, which we may have to pay if a court decides that the product or proprietary technology at issue infringes upon or violates the third-party's rights;
- pay substantial royalties or fees or grant cross-licenses to our technology; and
- defend litigation or administrative proceedings that may be costly whether we win or lose, and which could result in a substantial diversion of our financial and management resources.

Some of our competitors may be able to sustain the costs of complex patent litigation more effectively than we can, because they have substantially greater resources. In addition, any uncertainties resulting from the initiation and continuation of any litigation could have a material adverse effect on our ability to raise the funds necessary to continue our operations or could otherwise have a material adverse effect on our business, results of operations, financial condition and prospects.

We may choose to challenge the patentability of claims in a third party's U.S. patent by requesting that the USPTO review the patent claims in an ex-parte re-exam, inter partes review or post-grant review proceedings. These proceedings are expensive and may consume time or other resources. We may choose to challenge a third party's patent in patent opposition proceedings in the European Patent Office, or EPO, or other foreign patent office. The costs of these opposition proceedings could be substantial, and may consume time or other resources. If we fail to obtain a favorable result at the USPTO, EPO or other patent office, then we may be exposed to litigation by a third party alleging that the patent is infringed by our product candidates or proprietary technologies.

During the course of any intellectual property litigation, there could be public announcements of the initiation of the litigation, as well as results of hearings, rulings on motions and other interim proceedings in the litigation. If securities analysts or investors regard these announcements as negative, the perceived value of our product candidates, programs or intellectual property could be diminished. Accordingly, the market price of shares of our common stock may decline. Such announcements could also harm our reputation or the market for our future product candidates, which could have a material adverse effect on our business.

We may be involved in lawsuits to protect or enforce our patents or the patents of our licensors, which could be expensive, time-consuming and unsuccessful.

Competitors may infringe our patents or the patents that we license. In the event of infringement or unauthorized use, we may file one or more infringement lawsuits, which can be expensive and time-consuming. An adverse result in any such litigation proceedings could put one or more of our patents at risk of being invalidated, being found to be unenforceable or being interpreted narrowly and could put our patent applications at risk of not issuing. An adverse result could also require us to pay the legal fees of the opposing party. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation.

Many of our competitors are larger than us and have substantially greater resources. They are, therefore, likely to be able to sustain the costs of complex patent litigation longer than we could. In addition, the uncertainties associated with litigation could have a material adverse effect on our ability to raise any funds necessary to continue our operations, continue our internal research programs, in-license needed technology, or enter into development partnerships that would help us bring the Vicarious Surgical System to market.

In addition, patent litigation can be very costly and time-consuming. An adverse outcome in any such litigation or proceedings may expose us or any of our future development partners to loss of our proprietary position, expose us to significant liabilities, or require us to seek licenses that may not be available on commercially acceptable terms, if at all.

If a defendant were to prevail on a legal assertion of invalidity and/or unenforceability, we would lose at least part, and perhaps all, of the patent protection on the technology or process claimed by the patent. In addition, if the breadth or strength of protection provided by our patents or those of our future licensors is threatened, it could dissuade other companies from collaborating with us to license, develop or commercialize current or future product candidates. Such a loss of patent protection could have a material adverse effect on our business.

We may be required to protect our patents through procedures created to attack the validity of a patent at the USPTO. The USPTO hears post-grant proceedings, including PGR, IPR and derivation proceedings. An adverse determination in any such submission or proceeding could reduce the scope or enforceability of, or invalidate, our patent rights, which could adversely affect our competitive position. Because of a lower evidentiary standard in USPTO proceedings compared to the evidentiary standard in United States federal courts necessary to invalidate a patent claim, a third party could potentially provide evidence in a USPTO proceeding sufficient for the USPTO to hold a claim invalid even though the same evidence would be insufficient to invalidate the claim if first presented in a district court action. Accordingly, a third party may attempt to use the USPTO procedures to invalidate our patent claims that would not have been invalidated if first challenged by the third party as a defendant in a district court action. Thus, the America Invents Act (the "AIA") and its implementation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents, all of which could have a material adverse effect on our business, financial condition, results of operations and prospects.

Our issued patents could be found invalid or unenforceable if challenged in court, which could have a material adverse effect on our business.

Any of our intellectual property rights could be challenged or invalidated despite measures we take to obtain patent and other intellectual property protection with respect to our product candidates and proprietary technology. For example, if we or any of our partners were to initiate legal proceedings against a third party to enforce a patent covering the Vicarious Surgical System, the defendant in such litigation could counterclaim that our patent is invalid and/or unenforceable. In patent litigation in the United States, defendant counterclaims alleging invalidity and/or unenforceability are commonplace. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, including lack of novelty, obviousness or non-enablement, or failure to claim patent eligible subject matter. Grounds for an unenforceability assertion could be an allegation that someone connected with the prosecution of the patent withheld relevant information from the USPTO, or made a misleading statement during prosecution either in the U.S. or abroad. Third parties may also raise similar claims before the USPTO or foreign patent offices, even outside the context of litigation. The outcome following legal assertions of invalidity and unenforceability is unpredictable. With respect to the validity question, for example, we cannot be certain that there is no invalidating prior art of which we and the patent examiner were unaware or was otherwise not considered during prosecution. If a defendant were to prevail on a legal assertion of invalidity and/or unenforceability, we would lose at least part, and perhaps all, of the challenged patent. Such a loss of patent protection could have a material adverse effect on our business.

We may be subject to claims that our employees, consultants or independent contractors have wrongfully used or disclosed alleged trade secrets of their other clients or former employers to us, which could subject us to costly litigation.

As is common in the medical device industry, we engage the services of consultants and independent contractors to assist us in the development of the Vicarious Surgical System. Many of these consultants and independent contractors were previously employed at, or may have previously provided or may be currently providing consulting or other services to, universities or other technology or medical device companies, including our competitors or potential competitors. We may become subject to claims that we, a consultant or an independent contractor, inadvertently or otherwise, used or disclosed trade secrets or other information proprietary to their former employers or their former or current clients. We may similarly be subject to claims stemming from similar actions of an employee, such as one who was previously employed by another company, including a competitor or potential competitor. Litigation may be necessary to defend against these claims. Even if we are successful in defending against these claims, litigation could result in substantial costs and be a distraction to our management team. If we were not successful, we could lose access or exclusive access to valuable intellectual property.

In addition, there could be public announcements of the results of hearings, motions or other interim proceedings or developments, and, if securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our common stock. This type of litigation or proceeding could substantially increase our operating losses and reduce our resources available for development activities. We may not have sufficient financial or other resources to adequately conduct such litigation or proceedings. Some of our competitors may be able to sustain the costs of such litigation or proceedings more effectively than we can because of their substantially greater financial resources. Uncertainties resulting from the initiation and continuation of patent litigation or other intellectual property related proceedings could adversely affect our ability to compete in the marketplace.

We may be subject to claims challenging the inventorship or ownership of our patents and other intellectual property.

We generally enter into confidentiality and intellectual property assignment agreements with our employees, consultants, and contractors. These agreements generally provide that inventions conceived by the party in the course of rendering services to us will be our exclusive property. However, those agreements may not be honored and may not effectively assign intellectual property rights to us. For example, even if we have a consulting agreement in place with an academic advisor pursuant to which such academic advisor is required to assign any inventions developed in connection with providing services to us, such academic advisor may not have the right to assign such inventions to us, as it may conflict with his or her obligations to assign all such intellectual property to his or her employing institution.

We may be subject to claims that former employees, collaborators or other third parties have an interest in our patents, trade secrets, or other intellectual property as an inventor or co-inventor. Also, former employees may become employed by competitors who develop similar technology, and could assist the competitor in designing around our patents. While it is our policy to require our employees and contractors who may be involved in the development of intellectual property to execute agreements assigning such intellectual property to us, we may be unsuccessful in executing such an agreement with each party who in fact develops intellectual property that we regard as our own. The assignment agreements entered into by us may not be self-executing or may be breached, and litigation may be necessary to defend against these and other claims challenging inventorship or our ownership of our patents, trade secrets or other intellectual property. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights, such as exclusive ownership of, or right to use, intellectual property that is important to our product candidates. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees. Any of the foregoing could have a material adverse effect on our business, financial condition, results of operations and prospects.

We may not be able to protect our intellectual property rights throughout the world, which could materially, negatively affect our business.

Filing, prosecuting and defending patents on current and future product candidates and technologies in all countries throughout the world would be prohibitively expensive, and many markets outside the United States will likely be smaller than the United States for commercializing the Vicarious Surgical System. We may therefore choose to pursue a more limited set of patent filings outside the United States, such that our intellectual property rights in some countries outside the United States may be less extensive than those in the United States, or may not be pursued at all in such countries. In addition, the laws of some foreign countries do not protect intellectual property rights to the same extent as federal and state laws in the United States. Consequently, regardless of whether we are able to prevent third parties from practicing our inventions in the United States, we may not be able to prevent third parties from practicing our inventions in all countries outside the United States, or from selling or importing products and technologies made using our inventions in and into the United States or other jurisdictions. Competitors may use our technologies in jurisdictions where we have not pursued and obtained patent protection to develop their own product candidates and technologies, and further, may export otherwise infringing products and technologies to territories where we have patent protection, but enforcement is not as strong as it is in the United States. These products and technologies may compete with our product candidates and technologies, and our patents or other intellectual property rights may not be effective or sufficient to prevent them from competing. Even if we pursue and obtain issued patents in particular jurisdictions, our patent claims or other intellectual property rights may not be effective or sufficient to prevent third parties from competing in such jurisdictions. Patent protection must ultimately be sought on a country-by-country basis, which is an expensive and time-consuming process with uncertain outcomes. Accordingly, we may choose not to seek patent protection in certain countries, and we will not have the benefit of patent protection in such countries.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents and other intellectual property protection, which could make it difficult for us to stop the infringement of our patents or marketing of competing products and technologies in violation of our proprietary rights generally. Proceedings to enforce our patent rights in foreign jurisdictions could result in substantial costs and divert our efforts and attention from other aspects of our business. These proceedings could put our patents at risk of being invalidated or interpreted narrowly and our patent applications at risk of not issuing. Additionally, these proceedings could provoke third parties to assert claims against us. We may not prevail in any lawsuits that we initiate and the damages or other remedies awarded, if any, may not be commercially meaningful. Accordingly, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or license and may adversely impact our business.

In addition, we also face the risk that the Vicarious Surgical System will be imported or reimported into markets with relatively higher prices from markets with relatively lower prices, which would result in a decrease of sales and any payments we receive from the affected market. Recent developments in U.S. patent law have made it more difficult to stop these and related practices based on theories of patent infringement.

Patent terms may be inadequate to protect our competitive position on technology for an adequate amount of time.

Patents have a limited lifespan. In the United States, if all maintenance fees are timely paid, the natural expiration of a patent is generally 20 years from its earliest U.S. non-provisional filing date. Various extensions may be available, but the life of a patent, and the protection it affords, is limited. Even if patents covering our product candidates are obtained, once the patent life has expired for a product, we may be open to competition. Given the amount of time required for the development, testing and regulatory review of new products, patents protecting such products might expire before or shortly after such products are commercialized. As a result, our patent portfolio may not provide us with sufficient rights to exclude others from commercializing products similar or identical to our product candidates for a meaningful amount of time, or at all.

Obtaining and maintaining our patent protection depends on compliance with various procedural, document submission, fee payment and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for non-compliance with these requirements.

The USPTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other provisions during the patent process. There are situations in which noncompliance can result in abandonment or lapse of a patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. In such an event, competitors might be able to enter the market earlier than would otherwise have been the case.

Periodic maintenance fees on any issued patent are due to be paid to the USPTO and foreign patent agencies in several stages over the lifetime of the patent. The USPTO and various foreign governmental patent agencies also require compliance with a number of procedural, documentary, fee payment (such as annuities) and other similar provisions during the patent application process and beyond. While an inadvertent lapse can in many cases be cured by payment of a late fee or by other means in accordance with the applicable rules, there are situations in which noncompliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. Non-compliance events that could result in abandonment or lapse of a patent or patent application include, but are not limited to, failure to respond to official actions within prescribed time limits, non-payment of fees and failure to properly legalize and submit formal documents. In some cases, our licensors may be responsible for these payments or filings, thereby decreasing our control over compliance with these requirements.

If we fail to comply with such procedural, documentary, payment and other provisions for any item of intellectual property, such intellectual property may become abandoned or may lapse.

If our trademarks and trade names are not adequately protected, then we may not be able to build name recognition in our markets of interest and our business may be adversely affected.

Our registered or unregistered trademarks or trade names may be challenged, infringed, circumvented or declared generic or determined to be infringing on other marks. We may not be able to protect our rights to these trademarks and trade names, which we need to build name recognition by potential partners or customers in our markets of interest. At times, competitors may adopt trade names or trademarks similar to ours, thereby impeding our ability to build brand identity and possibly leading to market confusion. In addition, there could be potential trade name or trademark infringement claims brought by owners of other registered trademarks. Over the long term, if we are unable to establish name recognition based on our trademarks and trade names, then we may not be able to compete effectively and our business may be adversely affected.

In addition, if we are unable to establish name recognition based on our trademarks and trade names, then we may not be able to compete effectively and our business may be adversely affected. We may license our trademarks and trade names to third parties, such as distributors. Though these license agreements may provide guidelines for how our trademarks and trade names may be used, a breach of these agreements or misuse of our trademarks and tradenames by our licensees may jeopardize our rights in, or diminish the goodwill associated with, our trademarks and trade names. Our efforts to enforce or protect our proprietary rights related to trademarks, trade names, trade secrets, domain names, copyrights or other intellectual property may be ineffective and could result in substantial costs and diversion of resources and could adversely affect our financial condition or results of operations.

Numerous factors may limit any potential competitive advantage provided by our intellectual property rights.

The degree of future protection afforded by our intellectual property rights is uncertain because intellectual property rights have limitations, and may not adequately protect our business, provide a barrier to entry against our competitors or potential competitors, or permit us to maintain our competitive advantage. Moreover, if a third party has intellectual property rights that cover the practice of our technology, we may not be able to fully exercise or extract value from our intellectual property rights. The following examples are illustrative:

- others may be able to develop and/or practice technology that is similar to our technology or aspects of our technology that are not covered by the claims of any patents that have issued, or may issue, from our owned or in-licensed patent applications;
- we might not have been the first to make the inventions covered by a pending patent application that we own or license;
- we might not have been the first to file patent applications covering an invention and therefore may not be able to obtain or maintain patent protection for the invention;
- others may independently develop similar or alternative technologies without infringing our intellectual property rights;
- pending patent applications that we own or license may not lead to issued patents;
- patents, if issued, that we own or license may not provide us with any competitive advantages, or may be interpreted narrowly or held invalid or unenforceable, as a result of legal challenges by our competitors;
- third parties may compete with us in jurisdictions where we do not pursue and obtain patent protection;
- we may not be able to obtain and/or maintain necessary or useful licenses on reasonable terms or at all;
- third parties may be able to also license the intellectual property that we have licensed nonexclusively;
- third parties may assert an ownership interest in our intellectual property and, if successful, such disputes may preclude us from exercising exclusive rights over that intellectual property;
- we may not be able to maintain the confidentiality of our trade secrets or other proprietary information;
- we may not develop or in-license additional proprietary technologies that are patentable; and
- one or more third parties may pursue continuation patent applications with claims directed to our product offerings, and if issued such patents may have an adverse effect on our business.

Should any of these events occur, they could significantly harm our business and results of operations.

Litigation Risks

In addition to IP litigation risks (referenced above), we face the risk of product liability claims and may be subject to damages, fines, penalties and injunctions, among other things.

Our business exposes us to the risk of product liability claims that are inherent in the testing, manufacturing and marketing of medical devices, including those which may arise from the misuse (including system hacking or other unauthorized access by third parties to our systems) or malfunction of, or design flaws in, our product candidates, when or if authorized for marketing. This liability may vary based on the FDA classification associated with our devices and with state law governing product liability standards applied to specification developers and/or manufacturers in a given negligence or strict liability lawsuit. We may be subject to product liability claims if the Vicarious Surgical System causes, or merely appears to have caused, an injury. Claims may be made by patients, healthcare providers or others selling the Vicarious Surgical System. The risk of product liability claims may also increase if our product candidates are subject to a recall or seizure. Product liability claims may be brought by individuals or by groups seeking to represent a class.

Although we have insurance at levels that we believe to be appropriate, this insurance is subject to deductibles and coverage limitations. Our current product liability insurance may not continue to be available to us on acceptable terms, if at all, and, if available, the coverage may not be adequate to protect us against any future product liability claims. If we are unable to maintain insurance at an acceptable cost or on acceptable terms with adequate coverage or otherwise protect against potential product liability claims, we may be exposed to significant liabilities, which may harm our business. A product liability claim, recall or other claim with respect to uninsured liabilities or for amounts in excess of insured liabilities could result in significant costs and significant harm to our business.

We may be subject to claims against us even if the apparent injury is due to the actions of others or misuse of the device or a partner device. Healthcare providers may use the Vicarious Surgical System in a manner inconsistent with the labeling and that differs from the manner in which it was used in clinical studies and authorization for use by the FDA. Off-label use of medical products by healthcare providers is common, and any such off-label use of the Vicarious Surgical System could subject us to additional liability, or require design changes to limit this potential off-label use once discovered. Defending a suit, regardless of merit, could be costly, could divert management attention and might result in adverse publicity, which could result in the withdrawal of, or result in reduced acceptance of, the Vicarious Surgical System in the market.

Additionally, we may enter into various agreements where we indemnify third parties for certain claims relating to the Vicarious Surgical System. These indemnification obligations may require us to pay significant sums of money for claims that are covered by these indemnification obligations. We are not currently subject to any product liability claims; however, any future product liability claims against it, regardless of their merit, may result in negative publicity about us that could ultimately harm our reputation and could have a material adverse effect on our business, financial condition, or results of operations.

Risks Related to Our Securities and to Being a Public Company

Our outstanding warrants became exercisable for our Class A common stock 30 days after the closing of our Business Combination, which increased the number of shares eligible for future resale in the public market and, upon exercise, will result in dilution to our stockholders.

Following the Business Combination, there were (i) 17,249,991 outstanding public warrants to purchase 17,249,991 shares of our Class A common stock at an exercise price of $11.50 per share, (ii) 8,900,000 outstanding private placement warrants issued in connection with D8's initial public offering exercisable for 8,900,000 shares of our Class A common stock at an exercise price of $11.50 per share, and (iii) 1,500,000 outstanding private placement warrants issued upon conversion of working capital loans made to D8 exercisable for 1,500,000 shares of our Class A common stock at an exercise price of $11.50 per share. The warrants became exercisable 30 days after the closing of our Business Combination, which occurred on September 17, 2021. In certain circumstances, the warrants may be exercised on a cashless basis. To the extent such warrants are exercised, additional shares of our Class A common stock will be issued, which will result in dilution to the holders of our Class A common stock and increase the number of shares eligible for resale in the public market. Sales of substantial numbers of such shares in the public market could adversely affect the market price of our Class A common stock, the impact of which is increased as the value of our stock price increases. However, there is no guarantee that the warrants will remain in the money prior to their expiration, and as such, the warrants may expire worthless.

The valuation of our warrants could increase the volatility in our net income (loss) in our consolidated statements of operations.

The change in fair value of our warrants is the result of changes in stock price and warrants outstanding at each reporting period. The change in fair value of warrant liabilities represents the mark-to-market fair value adjustments to the outstanding warrants issued in connection with the initial public offering of D8. Significant changes in our stock price or number of warrants outstanding may adversely affect our net income (loss) in our consolidated statements of operations.

We may face litigation and other risks as a result of the material weakness in our internal controls over financial reporting.

We have previously identified a material weakness in our internal controls over financial reporting. See "*We have identified a material weakness in our internal control over financial reporting. If we are unable to successfully remediate this material weakness in our internal control over financial reporting, we may not be able to report our financial condition or results of operations accurately or in a timely manner, which may adversely affect investor confidence in us and, as a result, materially and adversely affect our business and the value of our Class A common stock."*

As noted on our Form 10-Q/A as of and for the period ended September 30, 2021, we restated our financial statements to adjust the valuation of our public warrants ("the Restatement"). As a result of such material weakness, we face potential for litigation or other disputes which may include, among others, claims invoking the federal and state securities laws, contractual claims or other claims arising from the Restatement and material weaknesses in our internal control over financial reporting and the preparation of our financial statements. We can provide no assurance that such litigation or dispute will not arise in the future. Any such litigation or dispute, whether successful or not, could have a material adverse effect on our business, results of operations and financial condition.

We are an emerging growth company and a smaller reporting company within the meaning of the Securities Act, and if we take advantage of certain exemptions from disclosure requirements available to "emerging growth companies" or "smaller reporting companies," this could make our securities less attractive to investors and may make it more difficult to compare our performance with other public companies.

We are an "emerging growth company" within the meaning of the Securities Act, as modified by 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 nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. As a result, our stockholders may not have access to certain information they may deem important. We could be an emerging growth company for up to five years, although circumstances could cause us to lose that status earlier, including if the market value of our common stock held by non-affiliates exceeds $700 million as of the end of any second quarter of a fiscal year, in which case we would no longer be an emerging growth company as of the last day of such fiscal year. We cannot predict whether investors will find our securities less attractive because we will rely on these exemptions. If some investors find our securities less attractive as a result of our reliance on these exemptions, the trading prices of our securities may be lower than they otherwise would be, there may be a less active trading market for our securities and the trading prices of our securities may be more volatile.

Further, Section 102(b)(1) of the JOBS Act exempts emerging growth companies from being required to comply with new or revised financial accounting standards until private companies (that is, those that have not had a registration statement under the Securities Act declared effective or do not have a class of securities registered under the Exchange Act) are required to comply with the new or revised financial accounting standards. The JOBS Act provides that a company can elect to opt out of the extended transition period and comply with the requirements that apply to non-emerging growth companies but any such election to opt out is irrevocable. We have elected not to opt out of such extended transition period, which means that when a standard is issued or revised and it has different application dates for public or private companies, we, as an emerging growth company, can adopt the new or revised standard at the time private companies adopt the new or revised standard. This may make comparison of our financial statements with another public company that is not an emerging growth company or is an emerging growth company which has opted out of using the extended transition period difficult or impossible because of the potential differences in accounting standards used.

Additionally, we are a "smaller reporting company" as defined in Item 10(f)(1) of Regulation S-K. Smaller reporting companies may take advantage of certain reduced disclosure obligations, including, among other things, providing only two years of audited financial statements. We will remain a smaller reporting company until the last day of the fiscal year in which (i) the market value of our common stock held by non-affiliates is greater than or equal to $250 million as of the end of that fiscal year's second fiscal quarter, and (ii) our annual revenues are greater than or equal to $100 million during the last completed fiscal year and the market value of our common stock held by non-affiliates exceeds $700 million as of the end of that fiscal year's second fiscal quarter. To the extent we take advantage of such reduced disclosure obligations, it may also make comparison of our financial statements with other public companies difficult or impossible.

We cannot predict the impact our dual class structure may have on the stock price of our Class A common stock.

We cannot predict whether our dual class structure will result in a lower or more volatile market price of our Class A common stock or in adverse publicity or other adverse consequences. For example, certain index providers have announced restrictions on including companies with multiple-class share structures in certain of their indexes. Under these policies, our dual class capital structure would make us ineligible for inclusion in certain indices, and as a result, mutual funds, exchange-traded funds and other investment vehicles that attempt to passively track those indices will not be investing in our stock. It is unclear what effect, if any, these policies will have on the valuations of publicly traded companies excluded from such indices, but it is possible that they may depress valuations, as compared to similar companies that are included. As a result, the market price of shares of our Class A common stock could be adversely affected.

If securities or industry analysts do not publish research or reports about our business or if they issue an adverse or misleading opinion regarding our securities, our stock price and trading volume could decline.

The trading market for our securities is influenced by the research and reports that industry or securities analysts publish about us or our business. If one or more of these analysts ceases coverage of us or fails to publish reports on us regularly, we could lose visibility in the financial markets, which could cause the price and trading volume of our securities to decline. Further, if any of these analysts issues an adverse or misleading opinion regarding us, our business model, our industry or our stock performance or if our operating results fail to meet analyst expectations, the price of our securities could also decline.

Delaware law and our organizational documents contain certain provisions, including anti-takeover provisions that limit the ability of stockholders to take certain actions and could delay or discourage takeover attempts that stockholders may consider favorable.

The provisions of the General Corporation Law of the State of Delaware ("DGCL") and our organizational documents contain provisions that could have the effect of rendering more difficult, delaying, or preventing an acquisition that stockholders may consider favorable, including transactions in which stockholders might otherwise receive a premium for their shares. These provisions could also limit the price that investors might be willing to pay in the future for shares of our common stock, and therefore depress the trading price of our common stock. Additionally, these provisions could also make it difficult for stockholders to take certain actions, including electing directors who are not nominated by the current members of our board of directors or taking other corporate actions, including effecting changes in our management. Among other things, our organizational documents include provisions regarding:

- the ability of our board of directors to issue one or more series of preferred stock;
- the ability of our board of directors to issue shares of preferred stock, including "blank check" preferred stock and to determine the price and other terms of those shares, including preferences and voting rights, without stockholder approval, which could be used to significantly dilute the ownership of a hostile acquirer;
- limitations on the liability of, and the indemnification of, our directors and officers;
- the right of our board of directors to elect a director to fill a vacancy created by the expansion of our board of directors or the resignation, death or removal of a director, which prevents stockholders from being able to fill vacancies on our board of directors;
- the requirement that directors may only be removed from our board of directors for cause and upon the affirmative vote of the holders of at least 66 2/3% of the total voting power of then outstanding shares of our common stock;
- a prohibition on stockholder action by written consent (except for actions by the holders of our Class B common stock or as required for holders of future series of our preferred stock), which forces stockholder action to be taken at an annual or special meeting of stockholders and could delay the ability of stockholders to force consideration of a stockholder proposal or to take action, including the removal of directors;
- the requirement that a special meeting of stockholders may be called only by our board of directors, the chairman of our board of directors, or our chief executive officer, which could delay the ability of stockholders to force consideration of a proposal or to take action, including the removal of directors;
- controlling the procedures for the conduct and scheduling of our board of directors and stockholder meetings;
- the requirement for the affirmative vote of holders of at least 66 2/3% of the total voting power of all of the then outstanding shares of the voting stock, voting together as a single class, to amend, alter, change or repeal certain provisions in our certificate of incorporation (the "Charter") which could preclude stockholders from bringing matters before annual or special meetings of stockholders and delay changes in our board of directors and also may inhibit the ability of an acquirer to effect such amendments to facilitate an unsolicited takeover attempt;
- the ability of our board of directors to amend our amended and restated bylaws (the "Bylaws"), which may allow our board of directors to take additional actions to prevent an unsolicited takeover and inhibit the ability of an acquirer to amend the Bylaws to facilitate an unsolicited takeover attempt; and
- advance notice procedures with which stockholders must comply to nominate candidates to our board of directors or to propose matters to be acted upon at a stockholders' meeting, which could preclude stockholders from bringing matters before annual or special meetings of stockholders and delay changes in our board of directors and also may discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer's own slate of directors or otherwise attempting to obtain control of our company.

These anti-takeover provisions as well as certain provisions of Delaware law could make it more difficult for a third party to acquire us, even if the third party's offer may be considered beneficial by many of our stockholders. As a result, our stockholders may be limited in their ability to obtain a premium for their shares. If prospective takeovers are not consummated for any reason, we may experience negative reactions from the financial markets, including negative impacts on the price of our common stock. These provisions could also discourage proxy contests and make it more difficult for our stockholders to elect directors of their choosing and to cause us to take other corporate actions that our stockholders desire.

In addition, the provisions of the Director Nomination Agreement entered into on September 17, 2021, or the Director Nomination Agreement, with D8 Sponsor LLC provide it with certain board nomination rights which could also have the effect of delaying or preventing a change in control.

The provisions of our certificate of incorporation requiring exclusive forum in the Court of Chancery of the State of Delaware and the federal district courts of the United States for certain types of lawsuits may have the effect of discouraging certain lawsuits, including derivative lawsuits and lawsuits against us or our directors, officers or other employees, by limiting plaintiffs' ability to bring a claim in a judicial forum that they find favorable.

Our certificate of incorporation provides that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware (or, in the event that such court does not have subject matter jurisdiction, any other court located in the State of Delaware with subject matter jurisdiction), will be the sole and exclusive forum for (a) any derivative action or proceeding brought on behalf of us, (b) any action asserting a claim of breach of a fiduciary duty owed by any current or former director, officer, other employee or stockholder of ours to us or our stockholders, (c) any action asserting a claim against us or our officers or directors arising pursuant to any provision of the DGCL or the Charter or Bylaws or as to which the DGCL confers jurisdiction on the Court of Chancery of the State of Delaware, (d) any action to interpret, apply, enforce or determine the validity of the Charter or the Bylaws or any provision thereof, (e) any action asserting a claim against us or any current or former director, officer, employee, stockholder or agent of ours governed by the internal affairs doctrine of the law of the State of Delaware or (f) any action asserting an "internal corporate claim" as defined in Section 115 of the DGCL. The Charter also provides that, unless we consent in writing to the selection of an alternative forum, to the fullest extent permitted by law, the federal district courts of the United States will be the exclusive forum for the resolutions of any complaint asserting a cause of action arising under the Securities Act. This provision in the Charter does not address or apply to claims that arise under the Exchange Act. Section 27 of the Exchange Act creates exclusive federal jurisdiction over all suits brought to enforce any duty or liability created by the Exchange Act or the rules and regulations thereunder; to the extent these provisions could be construed to apply to such claims, there is uncertainty as to whether a court would enforce such provisions in connection with such claims, and our stockholders cannot waive compliance with the federal securities laws and the rules and regulations thereunder.

Any person or entity purchasing or otherwise acquiring any interest in any of our securities will be deemed to have notice of and consented to the provisions of the Charter described in the preceding paragraph. These provisions may have the effect of discouraging certain lawsuits, including derivative lawsuits and lawsuits against us and our directors and officers, by limiting plaintiffs' ability to bring a claim in a judicial forum that they find favorable. The enforceability of similar choice of forum provisions in other companies' certificates of incorporation or bylaws has been challenged in legal proceedings, and it is possible that, in connection with any applicable action brought against us, a court could find the choice of forum provisions contained in the Charter to be inapplicable or unenforceable in such action. Furthermore, if a court were to find these provisions of our certificate of incorporation inapplicable or unenforceable with respect to one or more of the specified types of actions or proceedings, we may incur additional costs associated with resolving such matters in other jurisdictions, which could materially adversely affect our business, financial condition and results of operations and result in a diversion of the time and resources of our management and board of directors.

Changes in laws or regulations, or a failure to comply with any laws and regulations, or any litigation that we may be subject to or involved in may adversely affect our business, investments and results of operations.

We are subject to laws, regulations and rules enacted by national, regional and local governments and the New York Stock Exchange on which our securities are listed. In particular, we are required to comply with certain SEC, NYSE, Delaware and other legal and regulatory requirements. Compliance with, and monitoring of, applicable laws, regulations and rules may be difficult, time-consuming and costly.

Those laws, regulations and rules and their interpretation and application may also change from time to time and those changes could have a material adverse effect on our business, investments and results of operations. For example, it is difficult to predict what impact, if any, changes in federal laws and policies, including those relating to tax, environmental, labor and employment, will have on our business and industry, the economy as a whole, consumer confidence and discretionary spending. Further, a recent ruling by the Court of Chancery in Delaware introduced uncertainty as to whether Section 242(b)(2) of the Delaware General Corporation Law ("DGCL") required a separate vote in favor of at least a majority of the outstanding shares of Class A common stock, in addition to a vote in favor of at least a majority of the outstanding shares of Class A and Class B common stock, voting together as a single class, to properly authorize shares of Class A common stock. In connection with the Business Combination, our stockholders authorized an increase in the number of shares of Class A common stock under Cayman Islands law, our jurisdiction at the time of the stockholder vote. Accordingly, we do not believe that the Delaware ruling applies to us. However, any failure to comply with applicable laws, regulations or rules, as interpreted and applied, could have a material adverse effect on our business and results of operations. Claims alleging that a portion of our Class A common stock was not authorized could lead to shares of our Class A common stock being voidable and have a material adverse effect on the Company and its prospects. In addition, uncertainty with respect to the Company's capitalization resulting from the Court of Chancery's ruling referenced above could have a material adverse impact on the Company, including on the Company's ability to complete equity financing transactions or issue stock-based compensation to its employees, directors and officers until the underlying issues are definitively resolved. This uncertainty could impair the Company's ability to execute its business plan, attract and retain employees, management and directors and adversely affect its commercial relationships.

Although we are not a "controlled company" within the meaning of the NYSE rules, we might become a "controlled company" in the future, and, as a result, our stockholders may not have certain corporate governance protections that are available to stockholders of companies that are not controlled companies.

If more than 50% of the voting power for the election of our directors is held by an individual, a group or another company, we will become a "controlled company" within the meaning of the NYSE corporate governance standards. Following the completion of the Business Combination, Adam Sachs, Sammy Khalifa, and Barry Greene held approximately 80.0% of the voting power of our outstanding capital stock. Messrs. Sachs, Khalifa and Greene have no agreement or arrangement to act together with respect to voting of the Class B common stock, and thus they have not formed a "group" for purposes of controlled company status. Although no individual, group or other company will have more than 50% of our voting power, Messrs. Sachs, Khalifa and Greene may in the future decide to act as a group, and this concentration of voting power would cause us to become a "controlled company" within the meaning of the NYSE corporate governance standards.

As a result, if we become a "controlled company" within the meaning of the NYSE corporate governance standards, then we will not be subject to the requirements that would otherwise require it to have: (i) a majority of independent directors; (ii) a nominating committee comprised solely of independent directors; (iii) compensation of our executive officers determined by a majority of the independent directors or a compensation committee comprised solely of independent directors; and (iv) director nominees selected, or recommended for our board of directors' selection, either by a majority of the independent directors or a nominating committee comprised solely of independent directors. Each share of Class A common stock initially entitles its holders to one vote on all matters presented to stockholders generally and each share of Class B common stock initially entitles its holders to twenty votes on all matters presented to stockholders generally. Accordingly, Messrs. Sachs, Khalifa and Greene, by virtue of their Class B common stock, hold approximately 80.0% of the voting power of our outstanding capital stock. Accordingly, those owners, if voting in the same manner, will be able to control the election and removal of the directors of our board of directors (subject to the Director Nomination Agreement) and thereby determine corporate and management policies, including potential mergers or acquisitions, payment of dividends, asset sales, amendment of the Charter and Bylaws and other significant corporate transactions of ours for so long as they retain significant ownership of Class B common stock. This concentration of ownership may delay or deter possible changes in control of us, which may adversely affect the market price of shares of our Class A common stock.

Our principal stockholders and management will exert significant influence over us and their interests may conflict with yours in the future.

Each share of Class A common stock initially entitles its holders to one vote on all matters presented to stockholders generally and each share of Class B common stock initially entitles its holders to twenty votes on all matters presented to stockholders generally. Accordingly, Messrs. Sachs, Khalifa and Greene, by virtue of their Class B common stock, hold approximately 80.0% of the voting power of our outstanding capital stock. Accordingly, those owners, if voting in the same manner, will be able to control the election and removal of the directors of our board of directors (subject to the Director Nomination Agreement) and thereby determine corporate and management policies, including potential mergers or acquisitions, payment of dividends, asset sales, amendment of the Charter and Bylaws and other significant corporate transactions of ours for so long as they retain significant ownership of Class B common stock. This concentration of ownership may delay or deter possible changes in control of us, which may adversely affect the market price of shares of our Class A common stock.

ITEM IB. UNRESOLVED STAFF COMMENTS.

None.

ITEM 2. PROPERTIES.

We currently maintain our executive offices at 78 Fourth Avenue, Waltham, Massachusetts 02451. We also occupy manufacturing and laboratory space located at 62 Fourth Avenue Waltham, MA 02451. We lease office space under operating leases. We consider our current office space adequate for our current operations.

ITEM 3. LEGAL PROCEEDINGS.

As of the date of this Annual Report on Form 10-K, to our knowledge, we are not party to and our property is not subject to any material pending legal proceedings. However, from time to time, we may become involved in legal proceedings or subject to claims that arise in the ordinary course of our business activities. Regardless of the outcome, such legal proceedings or claims could have an adverse impact on us because of defense and settlement costs, diversion of management resources, negative publicity and reputational harm, and other factors.

ITEM 4. MINE SAFETY DISCLOSURES.

Not applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES.

Market Information

Our Class A common stock and public warrants are currently listed on the NYSE under the symbols "RBOT," and "RBOT WS," respectively. We do not intend to list the private placement warrants on any securities exchange.

Holders

As of February 3, 2023, there were approximately 33 holders of record of our Class A common stock, three holders of record of our Class B common stock, three holders of record of the public warrants and two holders of record of the private placement warrants.

Such numbers do not include beneficial owners holding our securities through nominee names. There is no public market for our Class B common stock.

Dividends

We have not paid any cash dividends on our Class A common stock or Class B 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. The payment of any cash dividends will be within the discretion of our board of directors at such time.

Unregistered Sales of Securities

Not applicable.

Issuer Purchases of Equity Securities

Not applicable.

ITEM 6. [RESERVED]

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.

The following discussion and analysis provides information which management believes is relevant to an assessment and understanding of our condensed consolidated results of operations and financial condition. This discussion contains forward-looking statements and involves numerous risks and uncertainties, including, but not limited to, those described in the "Risk Factors" section of this Annual Report on Form 10-K. Actual results may differ materially from those contained in any forward-looking statements. Unless the context otherwise requires, references to "we", "us", "our", and "the Company" are intended to mean the business and operations of Vicarious Surgical Inc. and its consolidated subsidiaries.

Overview

We are combining advanced miniaturized robotics, computer science and 3D visualization to build a new category of intelligent and affordable, single-port surgical robot that virtually transports surgeons inside the patient to perform minimally invasive surgery. With our next-generation robotics technology and proprietary human-like surgical robots, we are seeking to improve patient outcomes, as well as the cost and efficacy of surgical procedures. Led by a visionary team of engineers from MIT, we intend to deliver the next generation in robotic surgery, designed to solve the shortcomings of both open surgery, as well as current manual and robot-assisted minimally invasive surgery.

We estimate there are over 39 million soft tissue surgical procedures addressable annually worldwide by our technology. Of these procedures, it is estimated that more than 50% are performed using open surgery, and less than 5% are performed by current robot-assisted minimally invasive surgery.

Financial Highlights

We are pre-revenue generating as of December 31, 2022.

We generated net income of $5,157 (in thousands) and incurred a net loss of $35,207 for the years ended December 31, 2022 and 2021, respectively, representing a period-over-period gain of 115%. The 2022 net income is inclusive of a gain of $84,000 related to the change in valuation of our warrant obligations. The 2021 net loss is inclusive of a gain of $3,085 related to the change in valuation of our warrant obligations. Our loss from operations prior to the warrant gain and other income and expense items was $80,078 and $38,223 for the years ended December 31, 2022 and 2021, respectively, representing a period-over-period loss of 110%, which was primarily due to a 77% increase in our average headcount and increased spending as we continue to develop our surgical robot. Our increase in average headcount was driven almost entirely by our ramp up in R&D personnel for which our average headcount increased by 67% from an average of 84 people in the year ended December 31, 2021 to an average of 140 people for the year ended December 31, 2022.

COVID-19

In March 2020, the World Health Organization declared the global outbreak of COVID-19 to be a pandemic. We continue to closely monitor the recent developments surrounding the continued spread and potential resurgence of COVID-19. The COVID-19 pandemic has had, and is expected to continue to have, an adverse impact on our operations, particularly as a result of preventive and precautionary measures that we, other businesses, and governments are taking. Refer to "Risk Factors" included elsewhere in this Annual Report on Form 10-K for more information. We are unable to predict the full impact that the COVID-19 pandemic will have on our future results of operations, liquidity and financial condition due to numerous uncertainties, including the duration of the pandemic, the actions that may be taken by government authorities across the United States. However, COVID-19 is not expected to result in any significant changes in costs going forward. We will continue to monitor the performance of our business and reassess the impacts of COVID-19.

Other Global Developments

In 2022, various central banks around the world (including the Federal Reserve in the United States) raised interest rates. While these rate increases have not had a significant adverse impact on the Company to date, the impact of such rate increases on the overall financial markets and the economy may adversely impact the Company in the future. In addition, the global economy has experienced and is continuing to experience high levels of inflation and global supply chain disruptions. We continue to monitor these supply chain, inflation and interest rate factors, as well as the uncertainty resulting from the overall economic environment.

In addition, although we have no operations in or direct exposure to Russia, Belarus and Ukraine, we have experienced limited constraints in availability and increasing costs required to obtain some materials and supplies due, in part, to the negative impact of the Russia-Ukraine military conflict on the global economy. To date, our business has not been materially impacted by the conflict; however, as the conflict continues or worsens, it may impact our business, financial condition or results of operations.

Business Combination

On September 17, 2021, we completed the Business Combination. The Business Combination was approved by D8's stockholders at its special meeting held on September 15, 2021. The transaction resulted in the combined company being renamed "Vicarious Surgical Inc.," Legacy Vicarious being renamed "Vicarious Surgical Operating Co." and the combined company's Class A common stock and warrants to purchase Class A common stock commencing trading on the NYSE on September 20, 2021 under the symbol "RBOT" and "RBOT WS", respectively. As a result of the Business Combination, we received gross proceeds of approximately $142.0 million.

On October 6, 2021, Legacy Vicarious changed its name from "Vicarious Surgical Operating Co." to "Vicarious Surgical US Inc."

Factors Affecting Results of Operations

The following factors have been important to our business and we expect them to impact our results of operations and financial condition in future periods:

Revenue

To date, we have not generated any revenue. We do not expect to generate revenue until at least 2024 and only then if we receive FDA authorization of our product candidate. Any revenue from initial sales of a new product is difficult to predict and, in any event, will initially only modestly reduce our continued net losses resulting from our increasing research and development and marketing activities.

Research and Development Expenses

Research and development, or R&D, expenses consist primarily of engineering, product development, regulatory expenses, medical affairs, and other costs associated with product candidates and technologies that are in development. These expenses include employee compensation, including stock-based compensation, supplies, consulting, prototyping, testing, materials, travel expenses, depreciation and an allocation of facility overhead expenses. Additionally, R&D expenses include costs associated with our internal and external costs associated with our regulatory compliance and quality assurance functions and overhead costs. We expect R&D expenses as a percentage of revenue to vary over time depending on the level and timing of our new product development efforts, as well as our clinical development, clinical trial and other related activities.

General and Administrative Expenses

General and administrative, or G&A, expenses consist primarily of compensation for personnel, including stock-based compensation, related to executive, finance and accounting, information technology and human resource functions. Other G&A expenses include travel expenses, professional services fees (including legal, audit and tax fees), insurance costs, general corporate expenses and allocated facilities-related expenses. We expect G&A expenses to continue to increase in absolute dollars as we expand our infrastructure to both drive and support the anticipated growth due to additional legal, accounting, insurance and other expenses associated with being a public company.

Sales and Marketing Expenses

Sales and marketing, or S&M, expenses consist primarily of compensation for personnel, including stock-based compensation, related to selling and marketing functions and physician education programs. Other S&M expenses include training, travel expenses, promotional activities, marketing initiatives, market research and analysis, conferences and trade shows, professional services fees and allocated facilities-related expenses. We expect S&M expenses to continue to increase in absolute dollars as we increase potential customers' awareness of our presence and prepares our sales and marketing function for our product launch at a future, yet undetermined date.

Change in Fair Value of Warrant Liabilities

Change in fair value of warrant liability represents the mark-to-market fair value adjustments to the outstanding Public Warrants and Private Placement Warrants assumed as part of the consummation of the Business Combination on September 17, 2021. The change in fair value of our Private Placement Warrants is primarily the result of the change in the underlying stock price of our stock used in the Black-Scholes option pricing model while the Public Warrants are marked-to-market based on their price on the NYSE. The warrant liability was measured at fair value initially on September 17, 2021 and is remeasured at exercise, and for warrants that remain outstanding at the end of each subsequent reporting period.

Interest Income

Interest income consists primarily of interest income earned on our cash and cash equivalents.

Interest Expense

Interest expense consists primarily of interest incurred on our term and equipment loans.

Results of Operations

The following table sets forth our historical operating results for the years ended December 31, 2022 and 2021:

	Year ended December 31,			
(in thousands, except for per share amounts)	**2022**	**2021**	**Change**	**% Change**
Operating expenses:				
Research and development	$ 43,900	$ 22,059	$ 21,841	99%
Sales and marketing	6,463	2,961	3,502	118%
General and administrative	29,715	13,203	16,512	125%
Total operating expenses	80,078	38,223	41,855	110%
Loss from operations	(80,078)	(38,223)	(41,855)	110%
Other income (expense):				
Change in fair value of warrant liabilities	84,000	3,085	80,915	2,623%
Interest income	1,435	20	1,415	N/M
Interest expense	(200)	(89)	(111)	125%
Income (loss) before income taxes	5,157	(35,207)	40,364	115%
Provision for income taxes	—	—	—	N/M
Net income (loss) and comprehensive income (loss)	$ 5,157	$ (35,207)	$ 40,364	115%
Net income (loss) per common share, basic and diluted	$ 0.04	$ (0.36)	$ 0.40	111%

Comparison of the years ended December 31, 2022 and 2021

Research and Development Expenses. Research and development expenses increased $21,841, or 99%, to $43,900 during the year ended December 31, 2022, compared to $22,059 during the year ended December 31, 2021. The increase in research and development expenses was primarily due to increases of $12,663 of personnel-related expenses, $4,547 in professional services, $2,328 in facility expenses, $1,389 in materials and supplies, $587 in equipment and depreciation costs, and $379 for travel expenses. The increase in personnel-related expenses was due primarily to an increase in average headcount of 67%, from an average of 84 people in 2021 to an average of 140 people in 2022, with the remainder of the increase attributable to increases in wages and benefits.

Sales and Marketing Expenses. Sales and marketing expenses increased $3,502, or 118%, from $2,961 in the year ended 2021 to $6,463 during the year ended December 31, 2022. The increase in sales and marketing costs was primarily due to increases of $3,136 in personnel-related expenses, $160 in professional services, and $172 in travel expenses. The increase in personnel-related expenses was due to an average headcount increase of 167%, from an average of 6 people in 2021 to an average of 16 people in 2022, with the remainder of the increase attributable to increases in wages and benefits.

General and Administrative Expenses. General and administrative expenses increased $16,512, or 125%, to $29,715 during the year ended December 31, 2022, compared to $13,203 during the year ended December 31, 2021. The increase in general and administrative costs was primarily due to increases of $10,867 in personnel-related expenses, $3,348 in insurance as a result of becoming a public company, and $2,178 in professional fees. The increase in personnel-related expenses was due to an average headcount increase of 93%, from an average of 15 people in 2021 to an average of 29 people in 2022, with the remainder of the increase attributable to increases in wages and benefits.

Change in Fair Value of Warrant Liabilities. The change in fair value of warrant liabilities during the year ended December 31, 2022 was an $84,000 gain. The change in fair value of warrant liability resulted from the remeasurement of the public and private placement warrant liabilities between December 31, 2021 and the end of the reporting period, December 31, 2022.

Interest Income. Interest income increased by $1,415 during the year ended December 31, 2022, compared to the year ended December 31, 2021. The increase in interest income was primarily due to an increase in interest rates on our invested cash balances during the year ended December 31, 2022, compared to the year ended December 31, 2021.

Interest Expense. Interest expense increased by $111 during the year ended December 31, 2022, compared to the year ended December 31, 2021. This increase was primarily due to paying off the $1.5 million term loan in October 2022 and the related acceleration of the deferred debt issuance costs.

Income Taxes. Our income tax provision consists of an estimate for U.S. federal and state income taxes based on enacted rates, as adjusted for allowable credits, deductions, uncertain tax positions, changes in deferred tax assets and liabilities and changes in tax law. Due to cumulative losses, we maintain a valuation allowance against our U.S. and state deferred tax assets.

Liquidity and Capital Resources

To date, our primary sources of capital have been private placements of preferred stock prior to the Business Combination, the recapitalization with D8 and the issuance of common stock. Net cash used in our operating activities for the years ended December 31, 2022 and 2021 was $61,211 and $33,298, respectively. As of December 31, 2022, we held cash and cash equivalents of $116,208 and had an accumulated deficit of $61,641.

Excluding the non-cash impact of potential changes in the fair value of warrant liabilities, we expect net losses to continue in connection with our ongoing activities, particularly as we continue to invest in commercialization and new product development. We believe our current cash balance of $116,208 will be sufficient to support our operations beyond the next twelve months.

We may seek to sell additional common or preferred equity or convertible debt securities, enter into an additional credit facility or another form of third-party funding or seek other debt financing. The sale of equity and convertible debt securities may result in dilution to our stockholders and, in the case of preferred equity securities or convertible debt, those securities could provide for rights, preferences or privileges senior to those of our common stock. The terms of debt securities issued or borrowings pursuant to a credit agreement could impose significant restrictions on our operations. If we raise funds through collaborations and licensing arrangements, we might be required to relinquish significant rights to our platform technologies or product candidates or grant licenses on terms that are not favorable to us. Additional capital may not be available on reasonable terms, or at all.

On October 7, 2022, we filed a universal shelf registration statement on Form S-3, which was declared effective by the SEC on October 27, 2022, on which we registered for sale up to $400 million of any combination of our Class A common stock, preferred stock, debt securities, warrants, rights and/or units from time to time and at prices and on terms that we may determine, which includes up to $100 million of Class A common stock that we may issue and sell from time to time, through Cowen and Company, LLC acting as our sales agent, pursuant to the sales agreement that we entered into with Cowen and Company, LLC on October 7, 2022 for our “at-the-market” equity program. In December 2022, we issued 3,048,781 shares of Class A common stock under our sales agreement with Cowen and Company, LLC, resulting in gross proceeds of $10.0 million.

Cash

Our cash and cash equivalents balance as of December 31, 2022 was $116,208. Our future capital requirements may vary from those currently planned and will depend on various factors, including the timing and extent of R&D spending and spending on other strategic business initiatives.

Cash Flows Summary

Comparison of the Years Ended December 31, 2022 and December 31, 2021

	Year Ended December 31,	
(in thousands)	**2022**	**2021**
Statement of Cash Flows Data:		
Net cash used in operating activities	$ (61,211)	$ (33,298)
Net cash used in investing activities	$ (5,352)	$ (1,289)
Net cash provided by financing activities	$ 9,145	$ 192,164

Cash flows for the Years Ended December 31, 2022 and 2021

Operating Activities

Net cash used in operating activities during the year ended December 31, 2022 was $61,211, attributable to net income of $5,157 plus a net change in our net operating assets and liabilities of $3,362 and offset by non-cash items of $69,730. Non-cash items consisted of an $84,000 gain from our warrant liabilities, partially offset by $12,255 in stock-based compensation, $1,111 of depreciation and amortization and $829 for non-cash lease expenses. The $3,362 change in our net operating assets and liabilities was primarily due to a $1,711 increase in accrued expenses, a $937 increase in lease liabilities, a $671 decrease in prepaid and other current assets, and a $135 increase in accounts payable partially offset by a $92 increase in other non-current assets.

Net cash used in operating activities for the year ended December 31, 2021 was $33,298, attributable to a net loss of $35,207 plus a net change in our net operating assets and liabilities of $955 and non-cash items of $954. Non-cash items consisted of $3,694 in stock-based compensation and $316 of depreciation and amortization, partially offset by a $3,085 gain from our warrant liabilities. The $955 change in our net operating assets and liabilities was primarily due to a $3,704 increase in accrued expenses, a $1,127 increase in accounts payable, and a $733 increase in deferred rent partially offset by a $4,609 increase in prepaid and other assets.

Cash flows used in Investing Activities

Net cash used in investing activities for the year ended December 31, 2022 was $5,352 for fixed asset purchases consisting primarily of leasehold improvements and R&D equipment.

Net cash used in investing activities for the year ended December 31, 2021 was $1,289 for equipment purchases.

Cash flows provided by Financing Activities

Net cash provided by financing activities for the year ended December 31, 2022 was $9,145 resulting from $9,700 of proceeds from the issuance of common stock net of issuance costs and $842 of proceeds from the exercise of stock options, partially offset by $1,350 of cash used to pay off the term loan in full.

Net cash provided by financing activities for the year ended December 31, 2021 was $192,164 and primarily related to $190,424 of proceeds from the reverse recapitalization and proceeds of $1,500 from the term loan and $421 of proceeds from the exercise of stock options and warrants, partially offset by $197 of cash used to pay back a portion of the outstanding term and equipment loans.

Critical Accounting Policies and Estimates

Our consolidated financial statements have been prepared in accordance with U.S. GAAP. The preparation of these consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities as of the consolidated balance sheet date, as well as the reported expenses incurred during the reporting periods. Our management bases its estimates on historical experience and on various other assumptions believed to be reasonable, the results of which form the basis for making judgments about the carrying values of assets and liabilities. Actual results could differ from those estimates, and such differences could be material to our consolidated financial statements.

While our significant accounting policies are described in the notes to our historical financial statements (see Note 2 of the accompanying financial statements), we believe the following critical accounting policy requires significant judgment and estimates in the preparation of our financial statements:

Stock-based compensation

We account for all stock-based compensation, including stock options and warrants, at fair value and recognize stock-based compensation expense for those equity awards, net of actual forfeitures, over the requisite service period, which is generally the vesting period of the respective award.

The fair value of our stock options on the date of grant is determined by a Black-Scholes pricing model utilizing key assumptions such as stock price, expected volatility and expected term. Our estimates of these assumptions are primarily based on the fair value of our stock, historical data, peer company data and judgment regarding future trends. Prior to becoming a publicly traded company, the fair value of our common stock was determined by our Board of Directors at each award grant date based upon a variety of factors, including the results obtained from an independent third-party valuation, our financial position and historical financial performance, the status of technological developments within our proposed product candidates, the illiquid nature of the common stock, arm's length sales of our capital stock, including convertible preferred stock, the effect of the rights and preferences of the preferred stockholders, and the prospects of a liquidity event, among others, as our common stock was not actively traded. Since becoming a publicly traded company, we use the publicly traded stock price as the fair value of our common stock. We use the simplified method when calculating the expected term due to insufficient historical exercise data. Volatility is based on a benchmark of comparable companies within the surgical robotics and medical device industries. The dividend yield used is zero, as we have never paid any cash dividends and do not anticipate doing so in the foreseeable future.

Recently Adopted Accounting Pronouncements

A description of recently issued accounting pronouncements that may potentially impact our financial position and results of operations is disclosed in Note 2 "Summary of Significant Accounting Policies – Recently Issued Accounting Pronouncements" in our financial statements contained in this Annual Report on Form 10-K.

Emerging Growth Company

Following the Business Combination, we became an "emerging growth company," as defined in the JOBS Act. Pursuant to the JOBS Act, an emerging growth company is provided the option to adopt new or revised accounting standards that may be issued by FASB or the SEC either (i) within the same periods as those otherwise applicable to non-emerging growth companies or (ii) within the same time periods as private companies. We intend to take advantage of the exemption for complying with new or revised accounting standards within the same time periods as private companies. Accordingly, the information contained herein may be different than the information you receive from other public companies.

We also intend to take advantage of some of the reduced regulatory and reporting requirements of emerging growth companies pursuant to the JOBS Act so long as we qualify as an emerging growth company, including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404(b) of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation, and exemptions from the requirements of holding non-binding advisory votes on executive compensation and golden parachute payments.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

We are a smaller reporting company as defined by Rule 12b-2 of the Exchange Act and are not required to provide the information required under this item.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA.

Audited Consolidated Financial Statements of Vicarious Surgical Inc. (formerly D8 Holdings Corp.)

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE.

Not applicable.

ITEM 9A. CONTROLS AND PROCEDURES.

Background and Remediation of Material Weakness

In connection with our evaluation of disclosure controls and procedures covering our consolidated financial statements as of December 31, 2022 and 2021, we identified material weaknesses in our internal control over financial reporting. We have concluded that material weaknesses exist in our evaluation of disclosure controls and procedures, including internal control over financial reporting, as we do not have the necessary business processes, personnel and related internal controls to operate in a manner to satisfy the accounting and financial reporting requirements of a public company. These material weaknesses manifested themselves in ways that included the improper segregation of duties relating to the recording of journal entries and the reconciliation of key accounts, as well as the analysis of accounting for certain transactions and accounts.

We are focused on designing and implementing effective internal controls measures to improve our evaluation of disclosure controls and procedures, including internal control over financial reporting, and remediate the material weaknesses. In order to remediate these material weaknesses, we have taken and plan to take the following actions:

- the hiring and continued hiring of additional accounting, finance and legal resources with public company experience; and
- implementation of additional review controls and processes requiring timely account reconciliation and analyses of certain transactions and accounts.

These actions and planned actions are subject to ongoing evaluation by management and will require testing and validation of design and operating effectiveness of internal controls over financial reporting over future periods. We are committed to the continuous improvement of our internal control over financial reporting and will continue to review the internal controls over financial reporting.

Evaluation of Disclosure Controls and Procedures

Under the supervision and with the participation of our management, including our principal executive officer and principal financial and accounting officer, we conducted an evaluation of the effectiveness of our disclosure controls and procedures as of the end of the fiscal year ended December 31, 2022, as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act. Based upon their evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) were not effective as of December 31, 2022 to provide reasonable assurance that information required to be disclosed in the reports we file and submit under the Securities and Exchange Act is recorded, processed, summarized and reported as and when required.

Disclosure controls and procedures are designed to ensure that information required to be disclosed by us in our Exchange Act reports is recorded, processed, summarized, and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to our management, including our principal executive officer and principal financial officer or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

Changes in Internal Control over Financial Reporting

There have been no changes in our internal control over financial reporting identified in connection with the evaluation of such internal control required by Rules 13a-15(d) and 15d-15(d) under the Exchange Act that occurred during the fiscal year ended December 31, 2022 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B. OTHER INFORMATION.

None.

ITEM 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS.

Not applicable.

PART III

Item 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE.

The response to this item is incorporated by reference from the discussion responsive thereto under the captions "Management and Corporate Governance," "Delinquent Section 16(a) Reports" and "Code of Conduct and Ethics" in the Company's Proxy Statement for the 2023 Annual Meeting of Stockholders.

Item 11. EXECUTIVE COMPENSATION.

The response to this item is incorporated by reference from the discussion responsive thereto under the captions "Executive Officer and Director Compensation," in the Company's Proxy Statement for the 2023 Annual Meeting of Stockholders.

Item 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS.

The response to this item is incorporated by reference from the discussion responsive thereto under the captions "Security Ownership of Certain Beneficial Owners and Management" and "Equity Compensation Plan Information" in the Company's Proxy Statement for the 2023 Annual Meeting of Stockholders.

Item 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE.

The response to this item is incorporated by reference from the discussion responsive thereto under the captions "Certain Relationships and Related Person Transactions" and "Management and Corporate Governance" in the Company's Proxy Statement for the 2023 Annual Meeting of Stockholders.

Item 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES.

The response to this item is incorporated by reference from the discussion responsive thereto under the caption "Ratification of Appointment of Independent Registered Public Accounting Firm" in the Company's Proxy Statement for the 2023 Annual Meeting of Stockholders.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES.

Item 15(a). The following documents are filed as part of this annual report on Form 10-K:

Item 15(a)(1) and (2) See "Index to Consolidated Financial Statements and Financial Statement Schedules" at Item 8 to this Annual Report on Form 10-K. Other financial statement schedules have not been included because they are not applicable or the information is included in the financial statements or notes thereto.

Item 15(a)(3) Exhibits

The following is a list of exhibits filed as part of this Annual Report on Form 10-K.

Exhibit Number	Exhibit Description	Filed Herewith	Incorporated by Reference Herein from Form or Schedule	Filing Date	SEC File/ Reg. Number
2.1†	Agreement and Plan of Merger, dated as of April 15, 2021, by and among Vicarious Surgical Inc. (formerly D8 Holdings Corp.), Snowball Merger Sub, Inc., and Vicarious Surgical Operating Co. (formerly Vicarious Surgical Inc.).		Form 8-K (Exhibit 2.1)	4/15/2021	001-39384
3.1	Certificate of Incorporation of Vicarious Surgical Inc.		Form 8-K (Exhibit 3.1)	9/23/2021	001-39384
3.2	Amended and Restated Bylaws of Vicarious Surgical Inc.		Form 8-K (Exhibit 3.2)	9/23/2021	001-39384
4.1	Description of Securities		Form 10-K (Exhibit 4.1)	3/31/2022	001-39384
4.2	Specimen Class A Common Stock Certificate		Form 8-K (Exhibit 4.1)	9/23/2021	001-39384
4.3	Warrant Agreement, dated as of July 14, 2020, by and between Vicarious Surgical Inc. (formerly D8 Holdings Corp.) and Continental Stock Transfer & Trust Company.		Form 8-K (Exhibit 4.1)	7/17/2020	001-39384
10.1	Form of Subscription Agreement, by and between Vicarious Surgical Inc. (formerly D8 Holdings Corp.), and the subscriber parties thereto.		Form 8-K (Exhibit 10.1)	4/15/2021	001-39384
10.2.1†	Building Lease for the premises located at 78 Fourth Avenue, Waltham, Massachusetts, dated as of January 25, 2021, by and among Vicarious Surgical Inc. and Fourth Avenue LLC.		Form S-4/A (Exhibit 10.12)	8/2/2021	333-257055
10.2.2†	Amendment to Lease, dated as of October 14, 2021, by and between Vicarious Surgical US Inc. and Fourth Avenue LLC		Form 8-K (Exhibit 10.1)	10/20/2021	001-39384
10.2.3†	Guaranty of Lease between Vicarious Surgical US Inc. and Fourth Avenue LLC dated as of October 14, 2021		Form 8-K (Exhibit 10.2)	10/20/2021	001-39384
10.3+	Executive Employment Agreement, dated as of July 13, 2021, by and between Vicarious Surgical Inc. and Adam Sachs.		Form S-4/A (Exhibit 10.13)	7/15/2021	333-257055
10.4+	Executive Employment Agreement, dated as of July 13, 2021, by and between Vicarious Surgical Inc. and Sammy Khalifa.		Form S-4/A (Exhibit 10.14)	7/15/2021	333-257055
10.5+	Executive Employment Agreement, dated as of July 13, 2021, by and between Vicarious Surgical Inc. and William Kelly.		Form S-4/A (Exhibit 10.15)	7/15/2021	333-257055
10.6+	Executive Employment Agreement, dated as of July 13, 2021, by and between Vicarious Surgical Inc. and June Morris.		Form S-4/A (Exhibit 10.16)	7/15/2021	333-257055
10.7+	Letter Agreement, dated as of June 2, 2021, by and between Vicarious Surgical and David Styka.		Form S-4/A (Exhibit 10.17)	7/15/2021	333-257055
10.8+	Amended and Restated Nonemployee Director Compensation Policy.		Form 10-Q (Exhibit 10.1)	5/9/2022	001-39384
10.9+	Vicarious Surgical Inc. 2014 Stock Incentive Plan, as amended.		Form 8-K (Exhibit 10.9)	09/23/2021	001-39384
10.10+	Vicarious Surgical Inc. 2021 Equity Incentive Plan, as amended, and forms of agreement thereunder.		Form 8-K (Exhibit 10.1)	6/3/2022	001-39384
10.11	Amended and Restated Registration Rights Agreement, dated as of September 17, 2021, by and among Vicarious Surgical Inc. (formerly D8 Holdings Corp.), Vicarious Surgical Operating Co. (formerly Vicarious Surgical Inc.) and certain of their securityholders.		Form 8-K (Exhibit 10.11)	09/23/2021	001-39384

10.12+	Form of Indemnification Agreement.		Form 8-K (Exhibit 10.12)	09/23/2021	001-39384
10.13	Director Nomination Agreement, dated as of September 17, 2021, by and between Vicarious Surgical Inc. (formerly D8 Holdings Corp.) and D8 Sponsor LLC.		Form 8-K (Exhibit 10.13)	09/23/2021	001-39384
10.14	Sales Agreement, dated as of October 7, 2022, by and between the Registrant and Cowen and Company, LLC		Form S-3 (Exhibit 1.2)	10/7/2022	333-267785
21.1	List of Subsidiaries		Form S-1 (Exhibit 21.1)	10/15/2021	333-260281
23.1	Consent of Deloitte & Touche LLP	X			
31.1	Certification of the Principal Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	X			
31.2	Certification of the Principal Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	X			
32*	Certifications of the Chief Executive Officer and Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	X			
101.INS	Inline XBRL Instance Document	X			
101.SCH	Inline XBRL Taxonomy Extension Schema Document	X			
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document	X			
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document	X			
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document	X			
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document	X			
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)	X			

* The certifications furnished in Exhibit 32 attached hereto are deemed to accompany this Annual Report on Form 10-K and will not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, except to the extent that the registrant specifically incorporates it by reference.

† Certain of the exhibits and schedules to this Exhibit have been omitted in accordance with Regulation S-K Item 601(a)(5). The Registrant agrees to furnish a copy of all omitted exhibits and schedules to the SEC upon its request.

\+ Management contract or compensatory plan or arrangement.

ITEM 16. FORM 10-K SUMMARY

Not applicable.

SIGNATURES

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

VICARIOUS SURGICAL INC.

Date: February 14, 2023

By: /s/ Adam Sachs
Adam Sachs
Chief Executive Officer and President

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

Signature	Title	Date
/s/ Adam Sachs Adam Sachs	Chief Executive Officer, President and Director (Principal Executive Officer)	February 14, 2023
/s/ William Kelly William Kelly	Chief Financial Officer and Treasurer (Principal Financial and Accounting Officer)	February 14, 2023
/s/ David Styka David Styka	Chairman	February 14, 2023
/s/ Victoria Carr-Brendel, Ph.D. Victoria Carr-Brendel, Ph.D.	Director	February 14, 2023
/s/ Beverly Huss Beverly Huss	Director	February 14, 2023
/s/ Sammy Khalifa Sammy Khalifa	Director	February 14, 2023
/s/ Ric Fulop Ric Fulop	Director	February 14, 2023
/s/ Donald Tang Donald Tang	Director	February 14, 2023
/s/ David Ho David Ho	Director	February 14, 2023

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the stockholders and the Board of Directors of Vicarious Surgical Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Vicarious Surgical Inc. and subsidiaries (the "Company") as of December 31, 2022 and 2021, the related consolidated statements of operations, convertible preferred stock, common stock, and stockholders' equity/(deficit), and cash flows, for each of the two years in the period ended December 31, 2022, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2022 and 2021, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2022, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

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

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

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

/s/ Deloitte & Touche LLP

Boston, Massachusetts

February 14, 2023

We have served as the Company's auditor since 2020.

VICARIOUS SURGICAL INC.
CONSOLIDATED BALANCE SHEETS
AS OF DECEMBER 31, 2022 and 2021
(in thousands, except share and per share data)

	December 31, 2022	December 31, 2021
Assets		
Current assets:		
Cash and cash equivalents	$ 116,208	$ 173,507
Prepaid expenses and other current assets	4,196	4,867
Total current assets	120,404	178,374
Restricted cash	936	1,055
Property and equipment, net	6,586	2,250
Right-of-use assets	12,273	—
Other long-term assets	92	—
Total assets	$ 140,291	$ 181,679
Liabilities, Convertible Preferred Stock and Stockholders' Equity		
Current liabilities:		
Accounts payable	$ 1,731	$ 1,500
Accrued expenses	5,808	4,098
Lease liabilities, current portion	838	—
Current portion of equipment loans	16	47
Current portion of term loan	—	600
Total current liabilities	8,393	6,245
Lease liabilities, net of current portion	14,832	—
Deferred rent	—	1,631
Equipment loans, net of current portion	—	16
Term loan, net of current portion and issuance costs	—	675
Warrant liabilities	6,021	90,021
Total liabilities	29,246	98,588
Commitments and Contingencies (Note 8)		
Legacy convertible preferred stock (Note 11)	—	—
Stockholders' equity:		
Preferred stock, $0.0001 par value; 1,000,000 shares authorized; no shares issued or outstanding at December 31, 2022 and 2021	—	—
Class A common stock, $0.0001 par value; 300,000,000 shares authorized at December 31, 2022 and 2021; 106,251,429 and 99,979,207 issued and outstanding at December 31, 2022 and 2021, respectively	11	10
Class B common stock, $0.0001 par value; 22,000,000 shares authorized at December 31, 2022 and 2021; 19,627,576 and 19,789,860 shares issued and outstanding at December 31, 2022 and 2021	2	2
Additional paid-in capital	172,673	149,877
Accumulated deficit	(61,641)	(66,798)
Total stockholders' equity	111,045	83,091
Total liabilities and stockholders' equity	$ 140,291	$ 181,679

See accompanying notes to these consolidated financial statements.

VICARIOUS SURGICAL INC.
CONSOLIDATED STATEMENTS OF OPERATIONS
FOR THE YEARS ENDED DECEMBER 31, 2022 AND 2021
(in thousands except, per share data)

	Year Ended December 31,	
	2022	**2021**
Operating expenses:		
Research and development	$ 43,900	$ 22,059
Sales and marketing	6,463	2,961
General and administrative	29,715	13,203
Total operating expenses	80,078	38,223
Loss from operations	(80,078)	(38,223)
Other income (expense):		
Change in fair value of warrant liabilities	84,000	3,085
Interest income	1,435	20
Interest expense	(200)	(89)
Income/(loss) before income taxes	5,157	(35,207)
Provision for income taxes	—	—
Net income/(loss) and comprehensive gain/(loss)	$ 5,157	$ (35,207)
Net income/(loss) per share of Class A and Class B common stock, basic and diluted	$ 0.04	$ (0.36)

See accompanying notes to these consolidated financial statements.

VICARIOUS SURGICAL INC.
CONSOLIDATED STATEMENTS OF CONVERTIBLE PREFERRED STOCK, COMMON STOCK AND STOCKHOLDERS' EQUITY/(DEFICIT)
FOR THE YEARS ENDED DECEMBER 31, 2022 AND 2021
(In thousands, except share data)

	Convertible Preferred Stock		Class A & B Common Stock		Additional Paid-In Capital	Accumulated Deficit	Total Stockholders' Equity/ (Deficit)
	Shares	Amount	Shares	Amount			
Balance, January 1, 2021	66,550,929	$ 46,670	20,662,068	$ 2	$ 1,772	(31,591)	(29,817)
Retroactive application of recapitalization (Note 1)	(66,550,929)	(46,670)	66,550,929	7	46,663	—	46,670
Adjusted balance, beginning of period	—	—	87,212,997	9	48,435	(31,591)	16,853
Reverse recapitalization, net of transaction costs (Note 1)	—	—	30,579,972	3	97,311	—	97,314
Cashless exercise of warrants	—	—	146,577	—	—	—	—
Exercise of common stock options	—	—	1,558,908	—	421	—	421
Exercise of public warrants	—	—	1,370	—	16	—	16
Stock-based compensation	—	—	—	—	3, 694	—	3, 694
Vesting of restricted stock	—	—	269,243	—	—	—	—
Net loss	—	—	—	—	—	(35,207)	(35,207)
Balance, December 31, 2021	—	—	119,769,067	$ 12	$ 149,877	$ (66,798)	$ 83,091
Exercise of common stock options	—	—	2,291,868	—	842	—	842
Exercise of public warrants	—	—	20	—	—	—	—
Stock-based compensation	—	—	—	—	12,255	—	12,255
Vesting of restricted stock	—	—	769,269	—	—	—	—
Issuance of common stock in an at-the-market offering, net of issuance costs of $300	—	—	3,048,781	1	9,699	—	9,700
Net income	—	—	—	—	—	5,157	5,157
Balance, December 31, 2022	—	$ —	125,879,005	$ 13	$ 172,673	$ (61,641)	$ 111,045

See accompanying notes to these consolidated financial statements.

VICARIOUS SURGICAL INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2022 and 2021
(in thousands)

	Years Ended December 31,	
	2022	**2021**
Cash flows from operating activities:		
Net income/(loss)	$ 5,157	$ (35,207)
Adjustments to reconcile net income/(loss) to net cash used in operating		
Operating activities:		
Depreciation	1,111	316
Loss on disposal of fixed assets	—	8
Stock-based compensation	12,255	3,694
Amortization of debt issuance costs	75	21
Non-cash lease expense	829	—
Change in fair value of warrant liabilities	(84,000)	(3,085)
Changes in operating assets and liabilities:		
Prepaid expenses and other current assets	671	(4,609)
Accounts payable	135	1,127
Accrued expenses	1,711	3,704
Lease liabilities	937	—
Deferred rent	—	733
Other noncurrent assets	(92)	—
Net cash used in operating activities	(61,211)	(33,298)
Cash flows from investing activities:		
Purchases of property and equipment	(5,352)	(1,289)
Net cash used in investing activities	(5,352)	(1,289)
Cash flows from financing activities:		
Repayment of equipment loans	(47)	(47)
Gross proceeds from issuance of common stock in an at-the-market offering	10,000	—
Issuance costs related to issuance of common stock in an at-the-market offering	(300)	—
Proceeds from term loan	—	1,500
Repayment of term loan	(1,350)	(150)
Proceeds from reverse recapitalization, net of issuance costs	—	190,424
Proceeds from exercise of public warrants	—	16
Proceeds from exercise of stock options	842	421
Net cash provided by financing activities	9,145	192,164
Change in cash, cash equivalents and restricted cash	(57,418)	157,577
Cash, cash equivalents and restricted cash, beginning of year	174,562	16,985
Cash, cash equivalents and restricted cash, end of year	$ 117,144	$ 174,562
Reconciliation of restricted cash:		
Cash and cash equivalents	116,208	173,507
Restricted cash	936	1,055
	$ 117,144	$ 174,562
Supplemental cash flow information:		
Interest paid	$ 41	$ 36
Non-cash investing and financing activities:		
Leasehold improvements funded by the landlord	$ 1,200	$ 840
Warrants assumed in acquisition	$ —	$ 93,110
Accruals for property, plant and equipment purchased during the period	$ 95	$ —

See accompanying notes to these consolidated financial statements.

1. NATURE OF BUSINESS AND BASIS OF PRESENTATION

Nature of Business

Vicarious Surgical Inc. (including its subsidiaries, "Vicarious" or the "Company") was originally incorporated in the Cayman Islands as a special purpose acquisition company under the name D8 Holdings Corp. ("D8") for the purpose of effecting a merger, capital stock exchange, asset acquisition, stock purchase, reorganization or similar business combination involving D8 and one or more businesses. On September 17, 2021, the Company consummated the transaction (the "Closing") contemplated by the Agreement and Plan of Merger, dated as of April 15, 2021 (the "Business Combination Agreement"), by and among D8, Snowball Merger Sub, Inc., a Delaware corporation and wholly owned subsidiary of D8 ("Merger Sub"), and Vicarious Surgical Inc., a Delaware corporation incorporated in the State of Delaware on May 1, 2014 ("Legacy Vicarious Surgical"). The Company is headquartered in Waltham, Massachusetts.

Pursuant to the terms of the Business Combination Agreement, a business combination between D8 was effected through the merger of Merger Sub with and into Legacy Vicarious Surgical, with Legacy Vicarious Surgical surviving as a wholly owned subsidiary of D8 (the "Merger," and collectively with the other transactions described in the Business Combination Agreement, the "Business Combination"). Effective as of the Closing, D8 changed its named to Vicarious Surgical Inc. and Legacy Vicarious Surgical changed its name to Vicarious Surgical US Inc.

The Company is currently developing its virtual reality surgical system using proprietary human-like surgical robots and virtual reality to transport surgeons inside the patient to perform minimally invasive surgical procedures.

Unless otherwise indicated or the context otherwise requires, references in this Annual Report on Form 10-K to the "Company" and "Vicarious Surgical" refer to the consolidated operations of Vicarious Surgical Inc. References to "D8" refer to the Company prior to the consummation of the Business Combination and references to "Legacy Vicarious Surgical" refer to Vicarious Surgical Inc. prior to the consummation of the Business Combination.

Legacy Vicarious Surgical was deemed to be the accounting acquirer in the Business Combination. The determination was primarily based on Legacy Vicarious Surgical's stockholders having a majority of the voting power in the combined Company, Legacy Vicarious Surgical having the ability to appoint a majority of the Board of Directors of the Company, Legacy Vicarious Surgical's existing management team comprising the senior management of the combined Company, Legacy Vicarious Surgical comprising the ongoing operations of the combined Company and the combined Company assuming Vicarious Surgical's name. Accordingly, for accounting purposes, the Business Combination was treated as the equivalent of Legacy Vicarious Surgical issuing stock for the net assets of D8, accompanied by a recapitalization. The net assets of D8 are stated at historical cost, with no goodwill or other intangible assets recorded.

While D8 was the legal acquirer in the Business Combination, because Legacy Vicarious Surgical was deemed the accounting acquirer, the historical financial statements of Legacy Vicarious Surgical became the historical financial statements of the combined Company upon the consummation of the Business Combination. As a result, the financial statements included in this report reflect (i) the historical operating results of Legacy Vicarious Surgical prior to the Business Combination; (ii) the combined results of D8 and Legacy Vicarious Surgical following the close of the Business Combination; (iii) the assets and liabilities of Legacy Vicarious Surgical at their historical cost; and (iv) the Legacy Vicarious Surgical's equity structure for all periods presented, as affected by the recapitalization presentation.

In accordance with guidance applicable to these circumstances, the equity structure has been restated in all comparable periods up to September 17, 2021, to reflect the number of shares of the Company's common stock, $0.0001 par value per share, issued to Legacy Vicarious Surgical's stockholders in connection with the Business Combination. As such, the shares and corresponding capital amounts and earnings per share related to Legacy Vicarious Surgical's outstanding convertible preferred stock and Legacy Vicarious Surgical's common stock prior to the Business Combination have been retroactively restated as shares reflecting the exchange ratio of 3.29831 (the "Exchange Ratio") established in the Business Combination. Legacy Vicarious Surgical's convertible preferred stock previously classified as mezzanine was retroactively adjusted, converted into common stock and reclassified to permanent as a result of the reverse recapitalization.

Basis of Presentation

The consolidated financial statements of the Company are prepared in conformity with accounting principles generally accepted in the United States of America ("US GAAP") and pursuant to the regulations of the U.S Securities and Exchange Commission ("SEC"). Any reference in these notes to applicable guidance is meant to refer to GAAP as found in the Accounting Standards Codification ("ASC") and Accounting Standards Updates ("ASU") promulgated by the Financial Accounting Standards Board ("FASB").

Principles of Consolidation

The accompanying consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. All intercompany transactions and balances have been eliminated in consolidation.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The accompanying financial statements reflect the application of certain significant accounting policies as described in this note and elsewhere in the accompanying consolidated financial statements and notes.

Use of Estimates

The preparation of financial statements in conformity with US GAAP requires the Company's management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of expenses during the reporting periods presented. Estimates are used for, but are not limited to, the Company's ability to continue as a going concern, depreciation of property and equipment, fair value of financial instruments, and contingencies. Actual results may differ from those estimates.

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. Management has evaluated whether there are conditions and events that raise substantial doubt about the Company's ability to continue as a going concern within one year after the date the financial statements are issued.

Fair Value of Financial Instruments

US GAAP requires disclosure of fair value information about financial instruments, whether or not recognized in the balance sheet, for which it is practicable to estimate that value. US GAAP provides a fair value hierarchy that prioritizes the inputs for the valuation techniques. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements) and minimizes the use of unobservable inputs. The most observable inputs are used, when available. The three levels of the fair value hierarchy are described as follows:

Level 1 — Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets that the Company has the ability to access.

Level 2 — Inputs to the valuation methodology include quoted prices for similar assets and liabilities in active markets; quoted prices for identical or similar assets and liabilities in markets that are not active; inputs other than quoted prices that are observable for the asset or liability; and inputs that are derived from, or corroborated by, observable market data by correlation or other means.

Level 3 — Inputs to the valuation methodology are unobservable and significant to the fair value measurement.

The carrying values of prepaid expenses, accounts payable, and accrued expenses approximate their fair values due to the short-term nature of the instruments.

The fair value of the Company's publicly traded warrants (the "Public Warrants") is determined from their trading value on public markets. The fair value of the Company's warrants sold in a private placement (the "Private Placement Warrants") is calculated using the Black-Scholes option pricing model since these instruments do not have the early redemption feature.

Cash and Cash Equivalents

Cash and cash equivalents consist of checking accounts and money market funds. The Company considers all highly liquid investments with an original maturity of 90 days or less at the date of purchase to be cash equivalents.

Restricted Cash

The Company has an agreement to maintain a cash balance of $936 and $1,055 at December 31, 2022 and 2021, respectively as collateral for letters of credit related to the Company's lease. The balance is classified as long-term on the Company's balance sheets as the lease period ends in March 2032.

Concentrations of Credit Risk and Off-Balance-Sheet Risk

The Company has no significant off-balance-sheet risk, such as foreign exchange contracts, option contracts, or other foreign hedging arrangements. Financial instruments that potentially expose the Company to concentrations of credit risk consist mainly of cash and cash equivalents. The Company maintains its cash and cash equivalents principally with accredited financial institutions of high-credit standing.

Warrant Liabilities

The Company does not use derivative instruments to hedge its exposures to cash flow, market or foreign currency risks. Management evaluates all of the Company's financial instruments, including issued warrants to purchase its Class A common stock, to determine if such instruments are derivatives or contain features that qualify as embedded derivatives, pursuant to ASC 480 and ASC 815-15. The classification of derivative instruments, including whether such instruments should be recorded as liabilities or as equity, is re-assessed at the end of each reporting period.

As part of the Business Combination, the Company assumed 17,249,991 Public Warrants that are exercisable to purchase shares of Class A common stock to investors as well as 10,400,000 Private Placement Warrants. All of the Company's outstanding warrants are recognized as derivative liabilities in accordance with ASC 815-40. Accordingly, the Company recognizes the warrants as liabilities at fair value and adjusts the warrant liability to fair value at each reporting period. The liabilities are subject to re-measurement at each balance sheet date until exercised, and any change in fair value is recognized in the statement of operations. The fair value of Public Warrants was determined from their trading value on public markets. The fair value of Private Placement Warrants was calculated using the Black-Scholes option pricing model since these instruments do not have the early redemption feature.

Property and Equipment

Property and equipment are recorded at cost. Expenditures for repairs and maintenance are expensed as incurred. When assets are retired or disposed of, the assets and related accumulated depreciation are eliminated from the accounts, and any resulting gain or loss is included in the determination of net loss. Depreciation is calculated using the straight-line method over the estimated useful lives of the related assets.

Impairment of Long-Lived Assets

The Company continually evaluates whether events or circumstances have occurred that indicate that the estimated remaining useful life of its long-lived assets may warrant revision or that the carrying value of these assets may be impaired. During 2021, in connection with a lease termination, the Company disposed of $24 of fixed assets with accumulated depreciation of $16 incurring an $8 loss on the disposal.

Leases

Prior to January 1, 2022, the Company accounted for leases under Accounting Standards Codification ("ASC") 840, Leases ("ASC 840"). The Company recorded monthly rent expense on a straight-line basis, equal to the total of the payments due over the lease term, divided by the number of months of the lease term. The difference between rent expense recorded and the amount paid was charged to deferred rent.

Effective January 1, 2022, the Company adopted Accounting Standards Update ("ASU") 2016-02, Leases (Topic 842) ("ASC 842"), using the modified retrospective transition method. Under this method, financial statements for reporting periods after adoption are presented in accordance with ASC 842 and prior-period financial statements continue to be presented in accordance with ASC 840, the accounting standard originally in effect for such periods.

The adoption of ASC 842 requires lessees to record a lease liability which is initially measured at the present value of all future lease payments, and a right-of-use asset, associated with operating leases, is recorded on the Company's balance sheet. The standard also requires a single lease expense to be recognized within the statement of operations on a straight-line basis over the lease term. The effects of the Company's January 1, 2022 adoption of ASC 842 resulted in the Company recording lease liabilities and right-of-use assets associated with its operating leases on its consolidated balance sheet and did not have any effect on the consolidated statement of operations or consolidated statement of cash flows.

As part of the adoption of ASC 842, the Company elected to use the package of practical expedients permitted under the transition guidance. As a result, the Company did not reassess (i) whether any expired or existing contracts are or contain leases, (ii) the lease classification for any expired or existing leases, or (iii) initial direct costs for any existing leases. For each asset class and the related lease agreements in which the Company is the lessee that include lease and non-lease components, the Company made an election about the use of the practical expedient on all leases entered into or modified after January 1, 2022 to combine lease and non-lease components. Additionally, the Company elected to not record on the balance sheet leases with a term of twelve months or less.

Guarantees and Indemnifications

As permitted under Delaware law, the Company indemnifies its officers, directors, consultants and employees for certain events or occurrences that happen by reason of the relationship with, or position held at, the Company. Through December 31, 2022, the Company had not experienced any losses related to these indemnification obligations, and no claims were outstanding. The Company does not expect significant claims related to these indemnification obligations and, consequently, concluded that the fair value of these obligations is negligible, and no related liabilities have been established.

Research and Development

Research and development costs are expensed in the period incurred. Research and development costs include payroll and personnel expenses, consulting costs, software and web services, legal, raw materials and allocated overhead such as depreciation and amortization, rent and utilities. Advance payments for goods and services to be used in future research and development activities are recorded as prepaid expenses and are expensed over the service period as the services are provided or when the goods are consumed.

Stock-Based Compensation

The Company accounts for all stock-based compensation, including stock options, restricted stock units ("RSUs") and other forms of equity issued as compensation for services, at fair value and recognizes stock-based compensation expense for those equity awards, net of actual forfeitures, over the requisite service period, which is generally the vesting period of the respective award.

The fair value of the Company's stock options on the date of grant is determined by a Black-Scholes option pricing model utilizing key assumptions such as stock price, expected volatility and expected term. The Company's estimates of these assumptions are primarily based on the fair value of the Company's stock, historical data, peer company data and judgment regarding future trends. Prior to becoming a publicly traded company, the fair value of the Company's common stock was determined by the Board of Directors at each award grant date based upon a variety of factors, including the results obtained from an independent third-party valuation, the Company's financial position and historical financial performance, the status of technological developments within the Company's proposed product candidates, the illiquid nature of the common stock, arm's length sales of the Company's capital stock, including convertible preferred stock, the effect of the rights and preferences of the preferred stockholders, and the prospects of a liquidity event, among others, as the Company's common stock was not actively traded. Since becoming a publicly traded company, the Company uses its publicly traded stock price as the fair value of its common stock.

The fair value of RSUs is based on the closing stock price on the date of grant.

Income Taxes

The Company accounts for income taxes under the asset and liability method pursuant to ASC 740, *Accounting for Income Taxes*, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the financial statements. Under this method, the Company determines deferred tax assets and liabilities on the basis of the differences between the financial statement and tax bases of assets and liabilities by using enacted tax rates in effect for the year in which the differences are expected to reverse. The effect of a change in tax rates on deferred tax assets and liabilities is recognized in income in the period that includes the enactment date.

The Company recognizes deferred tax assets to the extent that management believes that these assets are more likely than not to be realized in the future. In making such a determination, management considers all available positive and negative evidence, including future reversals of existing taxable temporary differences, projected future taxable income, tax-planning strategies, and results of recent operations.

The Company provides reserves for potential payments of taxes to various tax authorities related to uncertain tax positions. Amounts recognized are based on a determination of whether a tax benefit taken by the Company in its tax filings or positions is "more likely than not" to be sustained on audit. The amount recognized is equal to the largest amount that is more than 50% likely to be sustained. Interest and penalties associated with uncertain tax positions are recorded as a component of income tax expense.

Net Income/(Loss) Per Share

Basic net income/(loss) per share attributable to common stockholders is computed by dividing the net income/(loss) attributable to common stockholders by the weighted average number of common shares outstanding for the period. Diluted net income/(loss) per share attributable to common stockholders is computed by dividing the net income/(loss) attributable to common stockholders by the weighted average number of common shares outstanding for the period, including potential dilutive common stock. For the purpose of this calculation, outstanding stock options, restricted stock units and stock warrants are considered potential dilutive common stock and are excluded from the computation of net loss per share as their effect is anti-dilutive.

Accordingly, in periods in which the Company reports a net loss, such losses are not allocated to such participating securities. In periods in which the Company reports a net loss attributable to common stockholders, diluted net loss per share attributable to common stockholders is the same as basic net loss per share attributable to common stockholders, since dilutive common shares are not assumed to be outstanding when their effect is anti-dilutive.

Comprehensive Income/(Loss)

There were no differences between net income/(loss) and comprehensive income/(loss) presented in the statements of operations for the years ended December 31, 2022 and 2021.

Segments

Operating segments are identified as components of an enterprise about which separate discrete financial information is made available for evaluation by the chief operating decision maker ("CODM") in making decisions regarding resource allocation and assessing performance. The CODM is the Company's chief executive officer. The Company manages its operations as a single segment for the purposes of assessing performance and making operating decisions. The Company's singular concentration is focused on the development of its virtual reality surgical system.

Emerging Growth Company Status

The Company is an "emerging growth company," as defined in the Jumpstart Our Business Startups Act (the "JOBS Act"). Pursuant to the JOBS Act, an emerging growth company is provided the option to adopt new or revised accounting standards that may be issued by Financial Accounting Standards Board ("FASB") or the SEC either (i) within the same periods as those otherwise applicable to non-emerging growth companies or (ii) within the same time periods as private companies. We intend to take advantage of the exemption for complying with new or revised accounting standards within the same time periods as private companies so long as we qualify as an emerging growth company. Accordingly, the information contained herein may be different than the information you receive from other public companies.

Recently Issued Accounting Standards

In June 2016, the FASB issued ASU No. 2016-13, *Financial Instruments-Credit Losses: Measurement of Credit Losses on Financial Instruments (Topic 326)*. ASU No. 2016-13 requires measurement and recognition of expected credit losses for financial assets. In April 2019, the FASB issued clarification to ASU No. 2016-13 within ASU No. 2019-04, *Codification Improvements to Topic 326, Financial Instruments-Credit Losses, Topic 815, Derivatives and Hedging, and Topic 825, Financial Instruments*. This update is effective for entities other than public business entities, including emerging growth companies that elected to defer compliance with new or revised financial accounting standards until a company that is not an issuer is required to comply with such standards, for annual reporting periods beginning after December 15, 2022. The Company is currently evaluating the impact that ASU No. 2016-13 will have on the financial statements and related disclosures.

In December 2019, the FASB issued ASU No. 2019-12, *Simplifying the Accounting for Income Taxes*. ASU No. 2019-12 eliminates certain exceptions related to the approach for intra-period tax allocation, the methodology for calculating income taxes in an interim period and the recognition of deferred tax liabilities for outside basis differences. It also clarifies and simplifies other aspects of the accounting for income taxes. The Company adopted ASU No. 2019-12 on January 1, 2022. The adoption did not have a material impact on the Company's consolidated financial statements as of and for the year ended December 31, 2022.

3. ACQUISITION

As discussed in Note 1, "Nature of Business and Basis of Presentation," on September 17, 2021, the Company and D8 consummated the Business Combination with Legacy Vicarious Surgical surviving the Merger as a wholly-owned subsidiary of D8. Upon the Closing, each share of Legacy Vicarious Surgical issued and outstanding held by stockholders other than the initial founders of Legacy Vicarious Surgical was automatically cancelled and extinguished and converted into the right to the number of shares of the Company's Class A common stock equal to the Exchange Ratio, and each share of Legacy Vicarious Surgical issued and outstanding held by the initial founders of Legacy Vicarious Surgical was automatically cancelled and extinguished and converted into the right to the number of shares of the Company's Class B common stock equal to the Exchange Ratio.

Upon the Closing, D8's certificate of incorporation was amended and restated to, among other things, increase the total number of authorized shares of all classes of capital stock to 143,931,076 shares, of which 124,141,216 were designated as Class A common stock and 19,789,860 were designated as Class B common stock both having a par value of $0.0001 per share.

In connection with the execution of the definitive agreement for the Business Combination, D8 entered into separate subscription agreements (each a "Subscription Agreement") with a number of investors (each a "Subscriber"), pursuant to which the Subscribers agreed to purchase, and D8 agreed to sell to the Subscribers, an aggregate of 14,200,000 shares of the Company's Class A common stock, for a purchase price of $10.00 per share and an aggregate purchase price of $142,000, in a private placement pursuant to the Subscription Agreements (the "PIPE financing"). The PIPE financing closed simultaneously with the consummation of the Business Combination.

The Business Combination is accounted for as a reverse recapitalization in accordance with US GAAP. Under this method of accounting, D8 was treated as the "acquired" company for financial accounting purposes. See Note 1, "Nature of Business and Basis of Presentation" for further details. Accordingly, for accounting purposes, the Business Combination was treated as the equivalent of Vicarious Surgical issuing stock for the net assets of D8, accompanied by a recapitalization. The net assets of D8 are stated at historical cost, with no goodwill or other intangible assets recorded.

The following table reconciles the elements of the Business Combination to the statement of cash flows and the statement of changes in equity for the year ended December 31, 2021.

	Recapitalization
Cash - D8's trust and cash (net of redemptions)	$ 77,993
Cash - PIPE Financing	142,000
Less: Transaction costs and advisory fees	(29,569)
Net proceeds from reverse recapitalization	190,424
Less: Warrant liabilities assumed	(93,110)
Net assets and liabilities assumed in reverse recapitalization	$ 97,314

The number of shares of common stock issued immediately following the consummation of the Business Combination was as follows:

	Number of Shares
Common stock, outstanding prior to the Business Combination	34,500,000
Less: Redemption of D8 shares	(26,745,028)
D8 Public Shares	7,754,972
D8 Sponsor Shares	8,625,000
Shares issued in PIPE financing	14,200,000
Business combination and PIPE financing shares	30,579,972
Legacy Vicarious Surgical shares (1)	88,042,340
Total shares of common stock immediately after Business Combination	118,622,312

(1) The number of Legacy Vicarious Surgical shares was determined from the shares of Legacy Vicarious Surgical shares outstanding immediately prior to the closing of the Business Combination converted at the Exchange Ratio of 3.29831. All fractional shares were rounded down.

4. PROPERTY AND EQUIPMENT, NET

Property and equipment, net consist of the following:

	Estimated Useful Lives	December 31, 2022	December 31, 2021
Machinery and equipment	3 to 5 years	$ 1,906	$ 957
Furniture and fixed assets	3 to 7 years	1,059	186
Computer hardware and software	3 years	1,155	259
Leasehold improvements	Lesser of lease term or asset life	4,161	1,432
Total property and equipment		8,281	2,834
Less accumulated depreciation		(1,695)	(584)
Property and equipment, net		$ 6,586	$ 2,250

In connection with the Waltham lease that was amended in October 2021, the Company received $1,200 in August 2022 related to leasehold improvements funded by its landlord. These leasehold improvements are being depreciated over the shorter of the lease term or each asset's life. The $1,200 was included in leasehold improvements.

In connection with the Waltham lease, the Company received $840 in May 2021 related to leasehold improvements funded by its landlord. These leasehold improvements are being depreciated over the shorter of the lease term or each asset's life. The $840 paid to vendors by the landlord was included in leasehold improvements.

During 2021, in connection with a lease termination, the Company disposed of $24 of fixed assets with accumulated depreciation of $16 incurring an $8 loss on the disposal which was included in general and administrative expenses.

Depreciation expense for the years ended December 31, 2022 and 2021 was $1,111 and $316, respectively.

5. FAIR VALUE MEASUREMENTS

The following fair value hierarchy table presents information about the Company's financial assets measured at fair value on a recurring basis and indicates the fair value hierarchy of the inputs the Company utilized to determine such fair value:

	December 31, 2022			
	Quoted Prices in Active Markets for Identical Items (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
Assets:				
Money market funds	$ 114,409	$ —	$ —	$ 114,409
Total assets	$ 114,409	$ —	$ —	$ 114,409
Liabilities:				
Warrant liabilities - public warrants	$ 2,589	$ —	$ —	$ 2,589
Warrant liabilities - private warrants	—	$ —	3,432	3,432
Total liabilities	$ 2,589	$ —	$ 3,432	$ 6,021

	December 31, 2021			
	Quoted Prices in Active Markets for Identical Items (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
Assets:				
Money market funds	$ 171,196	$ —	$ —	$ 171,196
Total assets	$ 171,196	$ —	$ —	$ 171,196
Liabilities:				
Warrant liabilities - public warrants	$ 37,085	$ —	$ —	$ 37,085
Warrant liabilities - private warrants	—	$ —	52,936	52,936
Total liabilities	$ 37,085	$ —	$ 52,936	$ 90,021

Money market funds are classified as cash and cash equivalents.

The fair value of the Public Warrants was determined from their value trading on the public markets.

The fair value of Private Placement Warrants was calculated using the Black-Scholes option pricing model. The significant assumptions used in the model were the Company's stock price, exercise price, expected term, volatility, interest rate, and dividend yield.

For the year ended December 31, 2022, the Company recognized a gain to the statement of operations resulting from a decrease in the fair value of liabilities of approximately $84,000 presented as change in fair value of warrant liabilities on the accompanying statement of operations.

For the year ended December 31, 2021, the Company recognized a gain to the statement of operations resulting from a decrease in the fair value of liabilities of approximately $3,085 presented as change in fair value of warrant liabilities on the accompanying statement of operations.

The Company estimates the volatility of its warrants based on implied volatility from the Company's Public Warrants and from historical volatility of select peer companies' common stock that matches the expected remaining life of the warrants. The risk-free interest rate is based on the U.S. Treasury zero-coupon yield curve on the grant date for a maturity similar to the expected remaining life of the warrants. The expected life of the warrants is assumed to be equivalent to their remaining contractual term. The dividend rate is based on the historical rate, which the Company anticipates remaining at zero.

The following table provides quantitative information regarding the inputs used in determining the fair value of the Company's Level 3 liabilities:

Private Placement Warrants	As of December 31, 2022	As of December 31, 2021
Volatility	72.0%	60.0%
Stock price	$ 2.02	$ 10.62
Expected life of options	3.7 years	4.7 years
Risk-free rate	4.1%	1.2%
Dividend yield	0.0%	0.0%

The following table shows the change in number and value of the warrants since December 31, 2021:

	Public		Private		Total	
	Shares	Value	Shares	Value	Shares	Value
December 31, 2021	17,248,621	$ 37,085	10,400,000	$ 52,936	27,648,621	$ 90,021
Exercised	(20)	—	—	—	(20)	—
Change in value	—	$ (34,496)	—	$ (49,504)	—	$ (84,000)
December 31, 2022	17,248,601	$ 2,589	10,400,000	$ 3,432	27,648,601	$ 6,021

6. ACCRUED EXPENSES AND OTHER CURRENT LIABILITIES

The following table summarizes the Company's components of accrued expenses and other current liabilities:

	Year Ended December 31,	
	2022	2021
Compensation and benefits related	$ 5,240	$ 3,233
Professional services and other	568	865
Accrued expenses	$ 5,808	$ 4,098

7. DEBT

Term Loan

In October 2020, the Company entered into a term loan agreement that provided the Company with the ability to borrow up to $3,500 with any amounts borrowed becoming due on April 1, 2024. The loan consisted of up to two tranches; a $1,500 tranche which became available to the Company upon the close of the loan agreement in October 2020 and was available to the Company to draw through March 31, 2021 and a second tranche of $2,000 which became available to the Company through September 30, 2021, upon the Company's successful achievement of a milestone related to the development of the Company's surgical robot. Although the milestone was achieved, the Company chose not to draw down the $2,000 tranche.

The term loan was interest-only through September 30, 2021, at which time the Company made the first of 30 equal monthly payments of principal plus interest. The term loan bears interest at a floating rate equal to the Prime Rate, but not less than a minimum rate of 3.25%. In addition, the final payment made at the earlier of the maturity of the loan or its termination included a deferred interest payment of 7.5% of the amount borrowed, resulting in a minimum annual rate of 5.98% to be paid to the lender. The term loan had prepayment fees if the Company elected to repay such loan prior to it becoming due, which penalties varied based upon the time remaining before the term loan was due. If the Company had repaid the term loan prior to the first anniversary of the term loan closing, it would have been required to pay a prepayment fee of 3% of the outstanding principal balance.

The loan had no financial covenants but did contain monthly reporting requirements and gave the lender a first priority lien on all Company assets. In March 2021, the Company borrowed the first tranche of $1,500. The outstanding balance of the term loan was $0 and $1,350 at December 31, 2022 and 2021, respectively.

In October 2022, the Company paid off the entire term loan balance. As the Company chose to repay the term loan prior to the second anniversary of the term loan closing, a prepayment fee of 2% of the outstanding principal balance applied.

Deferred Financing Costs

In connection with the term loan, the Company incurred $100 in expenses, inclusive of the warrant expense, which were netted against the long-term portion of the term loan proceeds. The Company amortized these costs over the life of the borrowing. In the years ended December 31, 2022 and 2021, $75 and $25, respectively of capitalized costs were amortized to interest expense.

Common Stock Warrant

In connection with the term loan, the Company issued the lender a warrant to purchase 254,794 shares of common stock at $0.41 per share. The fair value of the common stock warrant was $0.33 per share at the grant date, and the Company recorded a total of $85 in deferred financing costs associated with the warrant issuances which are netted against the long-term portion of the term loan proceeds. At the time of the Company's recapitalization, the lender elected to cashless exercise the warrants resulting in the net issuance of 146,577 shares of Class A common stock. The remaining 108,217 warrants were cancelled as the Company elected not to draw down the second tranche.

Equipment Loans

In March 2019, the Company entered into two equipment loans with a vendor for the purchase of manufacturing machinery. The equipment loans had an aggregate principal balance of $185 at inception, with forty-eight equal monthly payments of principal and interest due beginning ninety days after taking possession of the machinery. The equipment loans are collateralized by the underlying machinery. As of December 31, 2022 and 2021, the aggregate outstanding principal balance of the equipment loans was $0 and $16, respectively, net of current portions of $16 and $47, respectively.

The following table represents the future payments required under the noncancellable equipment agreements and includes interest of $1:

Years Ended December 31,	
2023	17
Total future equipment payments	$ 17

8. COMMITMENTS AND CONTINGENCIES

Legal Proceedings — From time to time, the Company may face legal claims or actions in the normal course of business. At each reporting date, the Company evaluates whether a potential loss amount or a potential range of loss is probable and reasonably estimable under the provisions of the authoritative guidance that addresses accounting for contingencies. The Company expenses as incurred the costs related to its legal proceedings.

9. LEASES

On January 1, 2022, the Company adopted Accounting Standards Update ("ASU") 2016-02 and all subsequent amendments, collectively codified in ASC Topic 842, "Leases" ("Topic 842"). The guidance requires modified retrospective adoption, either at the beginning of the earliest period presented or at the beginning of the period of adoption. We elected to apply the guidance at the beginning of the period of adoption and recorded right-of-use (ROU) leased assets of $14,302. In conjunction with this, we recorded lease liabilities, which had been discounted at our incremental borrowing rates, of $15,933. The impact of our adoption of Topic 842 on our current and deferred income taxes was immaterial. The adoption of ASC 842 had no effect on retained earnings.

The Company leases its office facility under a noncancelable operating lease agreement that expires in March 2032. Rent expense for the years ended December 31, 2022 and 2021 was $2,210 and $1,447, respectively.

A summary of the components of lease costs for the Company under ASC 842 for the year ended December 31, 2022 and under ASC 840 for the year ended December 31, 2021 were as follows:

	December 31,	
Lease costs	**2022**	**2021**
Operating lease costs	$ 2,210	$ 1,447
Total lease costs	$ 2,210	$ 1,447

Supplemental disclosure of cash flow information related to leases for the year ended December 31, 2022 was as follows:

	December 31, 2022
Cash paid	$ 1,644
Cash received	$ (1,200)
Total cash paid for amounts included in the measurement of operating lease liabilities (operating cash flows)	$ 444

The weighted-average remaining lease term and discount rate were as follows:

	December 31, 2022
Weighted-average remaining lease term (in years)	9.3
Weighted-average discount rate	8.74%

The following table presents the maturity of the Company's operating lease liabilities as of December 31, 2022:

Years Ended December 31,	
2023	2,162
2024	2,286
2025	2,358
2026	2,430
2027	2,502
Thereafter	11,430
Total future minimum lease payments	$ 23,168
Less imputed interest	(7,498)
Carrying value of lease liabilities	$ 15,670

On January 25, 2021, the Company entered into a twelve-year lease agreement that commenced on April 1, 2021 and ended on February 28, 2029, for its new corporate headquarters. Rental payments due over the period of the lease totaled $9.7 million. On October 14, 2021, the lease was amended to add additional space and was simultaneously extended to end on March 31, 2032. Rental payments due over the period of the lease were amended from $9.7 million to $25.0 million.

In November of 2021, the landlord of the Company's lease for its previous corporate headquarters, terminated the agreement and the Company and the landlord were disputing amounts due to the parties, if any, in accordance with the terms of the lease agreement. The Company and the landlord agreed to settle their dispute for a payment to the landlord of $118. The Company recorded this settlement by accruing $118 to general and administrative expense as of December 31, 2021. As the lease was terminated, the minimum lease payments that would have been due under the agreement have been excluded from the future minimum lease payments table presented above.

10. INCOME TAXES

The Company's entire pretax loss for the years ended December 31, 2022 and 2021 was from its U.S. domestic operations.

The Company recorded a tax loss for the years ended December 31, 2022 and 2021. Therefore, the Company recorded no current or deferred income tax expense or benefit for the years ended December 31, 2022 and 2021.

A reconciliation of the Company's statutory income tax rate to the Company's effective income tax rate is as follows:

	Year Ended December 31,	
	2022	2021
Income at US Statutory Rate	21%	21%
State taxes, net of federal benefit	(126)%	8%
Permanent differences	1%	0%
Change in fair value of warrants	(342)%	2%
Return to Provision	(28)%	—
Officer's compensation	2%	—
Transaction costs	—	5%
Stock-based compensation	6%	(1)%
Tax credits	(52)%	4%
Change in valuation allowance	518%	(39)%
	0%	0%

The Company's deferred tax assets and (liabilities) are as follows:

	Year Ended December 31,	
	2022	2021
Deferred Tax Assets:		
Net operating loss carryforwards	$ 27,688	$ 18,269
Tax credits	7,057	2,727
Stock based compensation	1,303	657
Capitalized R&D expenses	11,456	—
Accruals and reserves	1,953	1,065
Depreciation and amortization	61	56
Total deferred tax assets before valuation allowance	49,518	22,774
Valuation allowance	(49,518)	(22,774)
Net deferred tax assets	$ —	$ —

As of December 31, 2022 and 2021 the Company is in a net deferred tax asset position. The deferred tax assets consist principally of net operating loss carryforwards and research and development tax credits. The future realization of the tax benefits from existing temporary differences and tax attributes ultimately depends on the existence of sufficient taxable income. In assessing the realization of the deferred tax assets, management considers whether it is more likely than not that some portion or all of the deferred tax assets will not be realized. Management considers the scheduled reversal of projected future taxable income, and tax planning strategies in making this assessment. After consideration of all available evidence, both positive and negative, the Company has determined that it was more likely than not that the Company would not recognize the benefits of its federal and state net deferred tax assets. Accordingly, the Company has a full valuation allowance against the deferred tax assets as of December 31, 2022 and 2021. The change in the valuation allowance for the years ended December 31, 2022 and 2021 was an increase of $26.7 million and $13.8 million, respectively.

The Company has incurred losses since inception that would generally be available to reduce future taxable income. As of December 31, 2022, the Company had U.S. federal net operating loss carryforwards of $102.8 million which includes $2.8 million that expire at various dates from 2034 through 2037, and $100.0 million that have an unlimited carryforward period. As of December 31, 2022, the Company had state net operating loss carryforwards of $96.6 million which includes $96.6 million that expire at various dates from 2035 through 2041, and none that have an unlimited carryforward period.

As of December 31, 2022, the Company had U.S. federal and state research and development tax credits of $4.3 million and $3.5 million respectively.

The future realization of the Company's net operating loss carryforwards and other tax attributes may also be limited by the change in ownership rules under Code Section 382. Under Section 382 of the Code, if a corporation undergoes an "ownership change" (as defined in Section 382 of the Code), the corporation's ability to utilize its net operating loss carryforwards and other tax attributes to offset income may be limited. The Company has not completed a study to assess whether an ownership change has occurred or whether there have been multiple ownership changes.

The Company files income tax returns in the U.S. federal jurisdiction and in any state and local jurisdiction in which it operates. The Company is subject to tax examination by various taxing authorities. The Company is not currently under examination and is not aware of any issues under review that could result in significant payments, accruals or material deviation from its tax positions. To the extent the Company has tax attribute carryforwards, the tax years in which the attribute was generated may still be adjusted upon examination by the Internal Revenue Service and state and local tax authorities to the extent utilized in a future period. As of December 31, 2022, the tax years from 2018 to present remain open to examination by relevant taxing jurisdictions to which the Company is subject. However, to the extent the Company utilizes net operating losses from years prior to 2018, the statute remains open to the extent of the net operating losses or other credits that are utilized.

The calculation and assessment of the Company's tax exposures generally involve the uncertainties in the application of complex tax laws and regulations for federal, state and local jurisdictions. A tax benefit from an uncertain tax position may be recognized when it is more likely than not that the position will be sustained upon examination, including resolutions of any related appeals or litigation, on the basis of the technical merits. As of December 31, 2022, the Company has not recorded any liabilities related to uncertain tax positions in its financial statements. Similarly, the Company has not accrued any interest and penalties related to uncertain tax positions as of December 31, 2022. The Company recognizes accrued interest and penalties, if any, related to uncertain tax positions in tax expense in its financial statements.

11. STOCKHOLDERS' EQUITY

Authorized Shares

At December 31, 2022, the Company's authorized shares consisted of 300,000,000 shares of Class A common stock, $0.0001 par value; 22,000,000 shares of Class B common stock, $0.0001 par value; and 1,000,000 shares of preferred stock, par value of $0.0001 per share.

Legacy Vicarious Surgical Preferred Stock

In connection with the Business Combination, Legacy Vicarious Surgical's Convertible Preferred Stock ("Legacy Convertible Preferred Stock"), previously classified as mezzanine was retroactively adjusted, converted into Class A common stock, and reclassified to permanent equity as a result of the Business Combination. As of December 31, 2022, there were no Legacy Convertible Preferred Stock authorized, issued or outstanding. The following table summarizes details of Legacy Convertible Preferred Stock authorized, issued and outstanding immediately prior to the Business Combination:

	Prior to Business Combination		
	Shares		
Legacy Convertible Preferred Stock	Authorized	Issued and Outstanding	Preferred Stock
Series A Legacy Convertible Preferred Stock, $0.0001 par value	16,740,853	16,740,853	$ 6,477
Series A1 Legacy Convertible Preferred Stock, $0.0001 par value	26,107,321	26,107,321	16,678
Series A2 Legacy Convertible Preferred Stock, $0.0001 par value	10,036,853	10,036,853	9,995
Series A3 Legacy Convertible Preferred Stock, $0.0001 par value	18,267,057	13,665,901	13,520
Total	71,152,084	66,550,928	$ 46,670

Common Stock

Classes of Common Stock

Class A common stock receives one vote per share. Subject to preferences that may be applicable to any outstanding preferred stock, the holders of shares of Class A common stock are entitled to receive ratably such dividends, if any, as may be declared from time to time by the board of directors out of funds legally available for such purposes. In the event of any voluntary or involuntary liquidation, dissolution or winding up of our affairs, the holders of Class A common stock are entitled to share ratably in all assets remaining after payment of our debts and other liabilities, subject to prior distribution rights of preferred stock or any class or series of stock having a preference over the Class A common stock, then outstanding, if any.

Class B common stock receives 20 votes per share and converts into Class A at a one-to-one conversion rate per share. Holders of Class B common stock will share ratably together with each holder of Class A common stock, if and when any dividend is declared by the board of directors. Holders of Class B common stock have the right to convert shares of their Class B common stock into fully paid and non-assessable shares of Class A common stock, on a one-to-one basis, at the option of the holder at any time. Upon the occurrence of certain events, holders of Class B common stock automatically convert into Class A common stock, on a one-to-one basis. In the event of any voluntary or involuntary liquidation, dissolution or winding up of our affairs, the holders of Class B common stock are entitled to share ratably in all assets remaining after payment of our debts and other liabilities, subject to prior distribution rights of preferred stock or any class or series of stock having a preference over the Class B common stock, then outstanding, if any.

Restricted Stock Agreements — In 2014, the Company issued 19,789,860 shares of Legacy Class A common stock to the initial founders of the Company at par that contained a repurchase right by the Company at the lesser of the original purchase price of $0.0001 per share or the then current fair value of the share, which lapsed over a four-year period. In 2016 and 2018, these shares were amended with respect to the lapse of the repurchase rights, such that beginning as of January 2018 60% percent of the shares were vested and the remaining shares vest over a thirty-six month period.

As of January 30, 2021, the shares were fully vested and on September 17, 2021, in connection with the Business Combination, the shares were converted to Class B common stock.

In 2021, subsequent to the Business Combination, the Company issued 749,691 RSUs of Class A common stock to employees and members of the board of directors. The RSUs vest over a four-year period. The activity for common stock subject to vesting for the year ended December 31, 2022 is as follows:

	Shares Subject to Vesting	Weighted Average Grant Date Fair Value
Balance of unvested shares - December 31, 2021	698,051	$ 12.54
Granted	3,266,548	$ 3.89
Vested	(769,269)	$ 6.62
Forfeited	(110,207)	$ 8.20
Balance of unvested shares - December 31, 2022	3,085,123	$ 5.01

The total stock-based compensation related to RSUs during the years ended December 31, 2022 and 2021, was $5,286 and $800, respectively. As of December 31, 2022, the total unrecognized stock-based compensation expense related to unvested RSUs aggregated $14,939 and is expected to be recognized over a weighted average period of 2.9 years. As of December 31, 2021, the total unrecognized stock-based compensation expense related to unvested RSUs aggregated $8,400 and is expected to be recognized over a weighted average period of 3.3 years. The aggregate intrinsic value of the awards granted and vested during the year ended December 31, 2022 was $6,598 and $2,901, respectively. The aggregate intrinsic value of the awards granted and vested during the year ended December 31, 2021 was $6,407 and $480, respectively. The aggregate intrinsic value of RSUs outstanding at December 31, 2022 was $6,232.

Preferred Stock

Preferred stock shares authorized may be issued from time to time in one or more series, with each series terms, voting, dividend, conversion, redemption, liquidation and other rights to be determined by the Board of Directors at the time of issuance. As of December 31, 2022, there were no shares of preferred stock issued and outstanding.

Warrants

In D8's initial public offering, on July 17, 2020 it sold units at a price of $10.00 per unit, which consisted of one D8 Class A ordinary share, $0.0001 par value, and one-half of a redeemable Public Warrant. On July 17, 2020, simultaneously with the closing of its initial public offering, D8 consummated the private placement of 8,000,000 Private Placement Warrants, each exercisable to purchase one D8 Class A ordinary share at $11.50 per share, at a price of $1.00 per Private Placement Warrant. On July 24, 2020, simultaneously with the sale of D8's over-allotment units, D8 consummated a private sale of an additional 900,000 Private Placement Warrants. In connection with the Business Combination, 1,500,000 additional Private Placement Warrants were issued upon conversion of D8 working capital loans. In connection with the Business Combination, each issued and outstanding D8 Class A ordinary share automatically converted into one share of Class A common stock. Each warrant is exercisable to purchase one share of Class A common stock at $11.50 per share.

As of December 31, 2022, the Company had 17,248,601 Public Warrants and 10,400,000 Private Placement Warrants outstanding.

The Public Warrants became exercisable at $11.50 per share 30 days after the Closing. If and when the warrants become redeemable by the Company, the Company may exercise its redemption right even if it is unable to register or qualify the underlying securities for sale under all applicable state securities laws. The Company filed a registration statement with the SEC that was declared effective as of October 22, 2021 covering the shares of Class A common stock issuable upon exercise of the warrants and is maintaining a current prospectus relating to those shares of Class A common stock until the warrants expire, are exercised or redeemed, as specified in the warrant agreement.

The warrants will expire five years after the completion of a Business Combination or earlier upon redemption or liquidation.

Redemption of Warrants when the price per share of Class A common stock equals or exceeds $18.00. The Company may call the Public Warrants for redemption:

- in whole and not in part;
- at a price of $0.01 per warrant;
- upon a minimum of 30 days' prior written notice of redemption; and
- if, and only if, the last reported sale price of Class A common stock equals or exceeds $18.00 per share (as adjusted) for any 20 trading days within a 30-trading day period ending on the third trading day prior to the date on which the Company sends the notice of redemption to the warrant holders.

Redemption of Warrants when the price per share of Class A common stock equals or exceeds $10.00. The Company may call the Public Warrants for redemption:

- in whole and not in part;
- at a price of $0.10 per warrant;
- upon a minimum of 30 days' prior written notice of redemption; *provided* that holders will be able to exercise their warrants on a cashless basis prior to redemption and receive that number of shares based on the redemption date and the "fair market value" of the Company's Class A common stock; and
- if, and only if, the last reported sale price of Class A common stock shares equals or exceeds $10.00 per share (as adjusted) for any 20 trading days within a 30-trading day period ending three trading days before the Company sends the notice of redemption to the warrant holders.

The Private Placement Warrants are identical to the Public Warrants underlying the Units sold in D8's initial public offering, except that the Private Placement Warrants and the shares of Class A common stock issuable upon exercise of the Private Placement Warrants, so long as they are held by the Sponsor or its permitted transferees, (i) are not redeemable by the Company, (ii) could not (including the shares of Class A common stock issuable upon exercise of these warrants), subject to certain limited exceptions, be transferred, assigned or sold by the holders until 30 days after the completion of the initial Business Combination, (iii) may be exercised by the holders on a cashless basis and (iv) are entitled to registration rights. If the Private Placement Warrants are held by holders other than the Sponsor or its permitted transferees, the Private Placement Warrants will be redeemable by the Company and exercisable by the holders on the same basis as the Public Warrants.

12. STOCK-BASED COMPENSATION

2014 Plan — In 2014, Legacy Vicarious Surgical adopted the Vicarious Surgical Inc. 2014 Stock Incentive Plan (the "2014 Plan"), which provided for the granting of incentive and nonqualified stock options, restricted stock, and other stock-based awards to employees, officers, directors, consultants, and advisors of Legacy Vicarious Surgical. Legacy Vicarious Surgical reserved 19,914,315 shares of common stock for issuance under the 2014 Plan. The Legacy Vicarious Surgical board of directors administered the 2014 Plan and determined the specific terms of the awards. The contractual term of options granted under the 2014 Plan was 10 years from the date of grant. In connection with the Business Combination, the Company's stockholders voted to approve the 2021 Plan, which terminated and replaced the 2014 Plan, and options outstanding under the 2014 Plan were converted to options outstanding under the 2021 Plan. No additional awards will be granted under the 2014 Plan and no shares remained available for issuance pursuant to future grants under the 2014 Plan as of September 30, 2022 and December 31, 2021, respectively.

2021 Plan — In connection with the Closing, the Company's stockholders approved the Vicarious Surgical Inc. 2021 Equity Incentive Plan (the "2021 Plan"), pursuant to which 6,590,000 shares of Class A common stock were reserved for future equity grants under the 2021 Plan and 11,794,074 shares of Class A common stock were reserved for issuance under the 2021 Plan upon exercise of outstanding option awards assumed by the Company in connection with the Business Combination. On June 1, 2022, the Company's stockholders approved an amendment to the 2021 Plan, which provides for the granting of up to 6,590,000 additional shares of Class A common stock under the 2021 Plan as determined by the Board of Directors.

The 2021 Plan provides for the granting of incentive and nonqualified stock options, restricted stock, and other stock-based awards to employees, officers, directors, consultants, and advisors of the Company. Under the 2021 Plan, incentive and nonqualified stock options may be granted at not less than 100% of the fair market value of the Company's common stock on the date of grant. If an incentive stock option is granted to an individual who owns more than 10% of the combined voting power of all classes of the Company's capital stock, the exercise price may not be less than 110% of the fair market value of the Company's common stock on the date of grant and the term of the option may not be longer than five years.

The 2021 Plan authorizes the Company to issue up to 24,974,074 shares of common stock (either Class A or Class B) pursuant to awards granted under the 2021 Plan. The Board of Directors administers the 2021 Plan and determines the specific terms of the awards. The contractual term of options granted under the 2021 Plan is not more than 10 years. The 2021 Plan will expire on April 13, 2031 or an earlier date approved by a vote of the Company's stockholders or Board of Directors.

The Company grants stock options to employees at exercise prices deemed by the Board of Directors to be equal to the fair value of the common stock at the time of grant. The fair value of the Company's stock options and warrants on the date of grant is determined by a Black-Scholes pricing model utilizing key assumptions such as common stock price, risk-free interest rate, dividend yield, expected volatility and expected life. The Company's estimates of these assumptions are primarily based on the fair value of the Company's stock, historical data, peer company data and judgement regarding future trends. Prior to the Business Combination, the fair value of the Company's common stock was determined by the Board of Directors at each award grant date based upon a variety of factors, including the results obtained from a third-party valuation, the Company's financial position and historical financial performance, the status of technological development within the Company's proposed product candidates, the illiquid nature of the common stock, arm's-length sales of the Company's capital stock, including convertible preferred stock, the effect of the rights and preferences of the preferred shareholders, and the prospects of a liquidity event, among others, as the Company's common stock was not actively traded. Since becoming a publicly traded company, the Company uses its publicly traded stock price as the fair value of its common stock.

During the years ended December 31, 2022 and 2021, the Company granted options to purchase 5,576,191 and 5,870,433 shares, respectively of common stock, to employees and consultants with a fair value of $15,461 and $21,271, respectively, calculated using the Black-Scholes option-pricing model with the following assumptions:

	2022	2021
Risk-free interest rate	1.94% - 3.92%	0.45% - 1.45%
Expected term, in years	5.52 - 6.08	5.20 - 6.11
Dividend yield	—%	—%
Expected volatility	68.87% - 70.26%	69.66% - 71.02%

The risk-free interest rate assumption is based upon observed interest rates appropriate for the term of the related stock options. The expected life of employee and non-employee stock options was calculated using the average of the contractual term of the option and the weighted-average vesting period of the option, as the Company does not have sufficient history to use an alternative method to calculate an expected life for employees. The Company does not pay a dividend and is not expected to pay a dividend in the foreseeable future. Expected volatility for the Company's common stock was determined based on an average of the historical volatility of a peer group of similar public companies.

As of December 31, 2022, there was $25,427 of total gross unrecognized stock-based compensation expense related to unvested stock options. The costs remaining as of December 31, 2022 are expected to be recognized over a weighted-average period of 3.01 years.

Total stock-based compensation expense related to all of the Company's stock-based awards granted is reported in the statements of operations as follows:

	2022	2021
Research and development	$ 2,696	$ 975
Sales and marketing	1,296	621
General and administrative	8,263	2,098
Total	$ 12,255	$ 3,694

The Company plans to generally issue previously unissued shares of common stock for the exercise of stock options.

There were 3,465,275 shares available for future equity grants under the 2021 Plan at December 31, 2022.

The option activity of the 2021 Plan for the year ended December 31, 2022, is as follows:

	Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (in years)
Options outstanding at January 1, 2022	12,009,768	$ 2.92	7.76
Granted	5,576,191	4.34	
Exercised	(2,291,868)	0.36	
Forfeited, expired, or cancelled	(1,101,674)	2.89	
Options vested and expected to vest at December 31, 2022	14,192,417	$ 3.90	8.26

The weighted average grant date fair value of options granted during the years ended December 31, 2022 and 2021 was $2.77 and $3.62, respectively. The aggregate intrinsic value of options exercised during the years ended December 31, 2022 and 2021, was $10,066 and $13,010, respectively. The aggregate intrinsic value of options outstanding at December 31, 2022 was $6,804.

Common Stock Reserved for Future Issuance

As of December 31, 2022 and 2021, the Company has reserved the following shares of Class A Common Stock for future issuance (in thousands):

	As of December 31,	
	2022	2021
Common stock options outstanding	14,192	12,010
Restricted stock units outstanding	3,085	698
Shares available for issuance under the 2021 Plan	3,465	4,506
Public warrants	17,249	17,249
Private warrants	10,400	10,400
Total shares of authorized Common Stock reserved for future issuance	48,391	44,863

13. EMPLOYEE RETIREMENT PLAN

The Company maintains the Vicarious Surgical Inc. 401(k) plan, under Section 401(k) of the Internal Revenue Code of 1986, as amended, covering all eligible employees. Employees of the Company may participate in the 401(k) Plan after one month of service and must be 18 years of age or older. The Company offers company-funded matching contributions which totaled $802 and $424 for the years ended December 31, 2022 and 2021, respectively.

14. NET LOSS PER SHARE

The Company computes basic income/(loss) per share using net income/(loss) attributable to Vicarious Surgical Inc. common stockholders and the weighted average number of common shares outstanding during each period. Diluted loss per share includes shares issuable upon exercise of outstanding stock options and stock-based awards where the conversion of such instruments would be dilutive.

	For the Years Ended December 31,	
	2022	2021
Numerator for basic and diluted net loss per share:		
Net income/(loss)	$ 5,157	$ (35,207)
Denominator for basic net gain/(loss) per share:		
Weighted average shares	121,791,878	96,690,716
Denominator for diluted net gain/(loss) per share:		
Weighted average shares	127,528,509	96,690,716
Net income/(loss) per share of Class A and Class B common stock – basic and diluted	$ 0.04	$ (0.36)

For the year ended December 31, 2022, 35,604,874 shares of the Company's common stock were excluded from the calculation of diluted earnings per share because the exercise prices of the stock options were greater than or equal to the average price of the common shares and were therefore anti-dilutive.

15. SUBSEQUENT EVENTS

On February 1, 2023, the Company initiated a reduction in force, eliminating 14% of its workforce, predominantly in general and administrative and sales and marketing positions. No accrual was recorded as of December 31, 2022. Total separation costs associated with this reduction in force are anticipated to be under $1,000 and should be paid in full by the second quarter of 2023.

Management has evaluated subsequent events occurring through the date that these financial statements were issued and determined that no subsequent events other than that disclosed above or in the notes to these financial statements have occurred that would require recognition or disclosure in these financial statements.

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Exhibit 31.1

CERTIFICATIONS UNDER SECTION 302

I, Adam Sachs, certify that:

1. I have reviewed this annual report on Form 10-K of Vicarious Surgical Inc.;

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

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

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

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

b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

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

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

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

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

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

Date: February 14, 2023

/s/ Adam Sachs

Adam Sachs
Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATIONS UNDER SECTION 302

I, William Kelly, certify that:

1. I have reviewed this annual report on Form 10-K of Vicarious Surgical Inc.;

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

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

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

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

b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

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

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

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

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

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

Date: February 14, 2023

/s/ William Kelly
William Kelly
Chief Financial Officer
(Principal Financial Officer)

Exhibit 32

CERTIFICATIONS UNDER SECTION 906

Pursuant to section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of section 1350, chapter 63 of title 18, United States Code), each of the undersigned officers of Vicarious Surgical Inc., a Delaware corporation (the "Company"), does hereby certify, to such officer's knowledge, that:

The Annual Report for the year ended December 31, 2022 (the "Form 10-K") of the Company fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, and the information contained in the Form 10-K fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: February 14, 2023

/s/ Adam Sachs

Adam Sachs
Chief Executive Officer
(Principal Executive Officer)

Dated: February 14, 2023

/s/ William Kelly

William Kelly
Chief Financial Officer
(Principal Financial Officer)